SEQUENCE LISTING

SEQ ID 1

ATGGGGCAAACTAAAAGTAAAATTAAAAGTAAATATGCCTCTTATCTCAGCTTTATTAAAAATTCTTTTAAAAAGAGGGGGAGTTAAAGTATCTACAA
AAAATCTAATCAAGCTATTTCAAATAATAGAACAATTTTGCCCATGGTTTCCAGAACAAGGAACTTTAGATCTAAAAGATTGGAAAAGAATTGGTAA
GGAACTAAAACAAGCAGGTAGGAAGGGTAATATCATTCCACTTACAGTATGGAATGATTGGGCCATTATTAAAGCAGCTTTAGAACCATTTCAAACA
GAAGAAGATAGCGTTTCAGTTTCTGATGCCCCTGGAAGCTGTATAATAGATTGTAATGAAAACACAAGGAAAAAATCCCAGAAAGAAACGGAAGGTT
TACATTGCGAATATGTAGCAGAGCCGGTAATGGCTCAGTCAACGCAAAATGTTGACTATAATCAATTACAGGAGGTGATATATCCTGAAACGTTAAA
ATTAGAAGGAAAAGGTCCAGAATTAGTGGGGCCATCAGAGTCTAAACCACGAGGCACAAGTCCTCTTCCAGCAGGTCAGGTGCCTGTAACATTACAA
CCTCAAAAGCAGGTTAAAGAAAATAAGACCCAACCGCCAGTAGCCTATCAATACTGGCCTCCGGCTGAACTTCAGTATCGGCCACCCCCAGAAAGTC
AGTATGGATATCCAGGAATGCCCCCAGCACCACAGGGCAGGGCGCCATACCCTCAGCCGCCCACTAGGGAGACTTAATCCTACGGCACCACCTAGTAG
ACAGGGTAGTAAATTACATGAAATTATTGATAAATCAAGAAAGGAAGGAGATACTGAGGCATGGCAATTCCCAGTAACGTTAGAACCGATGCCACCT
GGAGAAGGAGCCCAAGAGGGAGAGCCTCCCACAGTTGAGGCCAGATACAAGTCTTTTTCGATAAAAAAGCTAAAGATATGAAAGAGGGAGTAAAAC
AGTATGGACCCAACTCCCCTTATATGAGGACATTATTAGATTCCATTGCTCATGGACATAGACTCATTCCTTATGATTGGGAGATTCTGGCAAAATC
GTCTCTCTCACCCTCTCAATTTTTACAATTTAAGACTTGGTGGATTGATGGGGTACAAGAACAGGTCCGAAGAAATAGGGCTGCCAATCCTCCAGTT
AACATAGATGCAGATCAACTATTAGGAATAGGTCAAAATTGGAGTACTATTAGTCAACAAGCATTAATGCAAAATGAGGCCATTGAGCAAGTTAGAG
CTATCTGCCTTAGAGCCTGGGAAAAAATCCAAGACCCAGGAAGTACCTGCCCCTCATTTAATACAGTAAGACAAGGTTCAAAAGAGCCCTATCCTGA
TTTTGTGGCAAGGCTCCAAGATGTTGCTCAAAAGTCAATTGCTGATGAAAAAGCCCGTAAGGTCATAGTGGAGTTGATGGCATATGAAAACGCCAAT
CCTGAGTGTCAATCAGCCATTAAGCCATTAAAAGGAAAGGTTCCTGCAGGATCAGATGTAATCTCAGAATATGTAAAAGCCTGTGATGGAATCGGAG
GAGCTATGCATAAAGCTATGCTTATGGCTCAAGCAATAACAGGAGTTGTTTTAGGAGGACAAGTTAGAACATTTGGAAGAAAATGTTATAATTGTGG
TCAAATTGGTCACTTAAAAAAGAATTGCCCAGTCTTAAATAAACAGAATATAACTATTCAAGCAACTACAACAGGTAGAGAGCCACCTGACTTATGT
CCAAGATGTAAAAAAGGAAAACATTGGGCTAGTCAATGTCGTTCTAAATTTGATAAAAATGGGCAACCATTGTCGGGAAACGAGCAAAGGGGCCAGC
CTCAGGCCCCACAACAAACTGGGGCATTCCCAATTCAGCCATTTGTTCCTCAGGGTTTTCAGGGACAACAACCCCCACTGTCCCAAGTGTTTCAGGG
AATAAGCCAGTTACCACAATACAACAATTGTCCCCCGCCACAAGCGGCAGTGCAGCAG

SEQ ID 2

ATGGGGCAAACTAAAAGTAAAATTAAAAGTAAATATGCCTCTTATCTCAGCTTTATTAAAAATTCTTTTAAAAAGAGGGGGAGTTAAAGTATCTACAA
AAAATCTAATCAAGCTATTTCAAATAATAGAACAATTTTGCCCATGGTTTCCAGAACAAGGAACTTTAGATCTAAAAGATTGGAAAAGAATTGGTAA
GGAACTAAAACAAGCAGGTAGGAAGGGTAATATCATTCCACTTACAGTATGGAATGATTGGGCCATTATTAAAGCAGCTTTAGAACCATTTCAAACA
GAAGAAGATAGCGTTTCAGTTTCTGATGCCCCTGGAAGCTGTATAATAGATTGTAATGAAAACACAAGGAAAAAATCCCAGAAAGAAACGGAAGGTT
TACATTGCGAATATGTAGCAGAGCCGGTAATGGCTCAGTCAACGCAAAATGTTGACTATAATCAATTACAGGAGGTGATATATCCTGAAACGTTAAA
ATTAGAAGGAAAAGGTCCAGAATTAGTGGGGCCATCAGAGTCTAAACCACGAGGCACAAGTCCTCTTCCAGCAGGTCAGGTGCCTGTAACATTACAA
CCTCAAAAGCAGGTTAAAGAAAATAAGACCCAACCGCCAGTAGCCTATCAATACTGGCCTCCGGCTGAACTTCAGTATCGGCCACCCCCAGAAAGTC
AGTATGGATATCCAGGAATGCCCCCAGCACCACAGGGCAGGGCGCCATACCCTCAGCCGCCCACTAGGGAGACTTAATCCTACGGCACCACCTAGTAG
ACAGGGTAGTAAATTACATGAAATTATTGATAAATCAAGAAAGGAAGGAGATACTGAGGCATGGCAATTCCCAGTAACGTTAGAACCGATGCCACCT
GGAGAAGGAGCCCAAGAGGGAGAGCCTCCCACAGTTGAGGCCAGATACAAGTCTTTTTCGATAAAAAAGCTGAAAGATATGAAAGAGGGAGTAAAAC
AGTATGGACCCAACTCCCCTTATATGAGGACATTATTAGATTCCATTGCTCATGGACATAGACTCATTCCTTATGATTGGGAGATTCTGGCAAAATC
GTCTCTCTCACCCTCTCAATTTTTACAATTTAAGACTTGGTGGATTGATGGGGTACAAGAACAGGTCCGAAGAAATAGGGCTGCCAATCCTCCAGTT
AACATAGATGCAGATCAACTATTAGGAATAGGTCAAAATTGGAGTACTATTAGTCAACAAGCATTAATGCAAAATGAGGCCATTGAGCAAGTTAGAG
CTATCTGCCTTAGAGCCTGGGAAAAAATCCAAGACCCAGGAAGTACCTGCCCCTCATTTAATACAGTAAGACAAGGTTCAAAAGAGCCCTATCCTGA
TTTTGTGGCAAGGCTCCAAGATGTTGCTCAAAAGTCAATTGCTGATGAAAAAGCCCGTAAGGTCATAGTGGAGTTGATGGCATATGAAAACGCCAAT
CCTGAGTGTCAATCAGCCATTAAGCCATTAAAAGGAAAGGTTCCTGCAGGATCAGATGTAATCTCAGAATATGTAAAAGCCTGTGATGGAATCGGAG
GAGCTATGTATAAAGCTATGCTTATGGCTCAAGCAATAACAGGAGTTGTTTTAGGAGGACAAGTTAGAACATTTGGAAGAAAATGTTATAATTGTGG
TCAAATTGGTCACTTAAAAAAGAATTGCCCAGTCTTAAATAAACAGAATATAACTATTCAAGCAACTACAACAGGTAGAGAGCCACCTGACTTATGT
CCAAGATGTAAAAAAGGAAAACATTGGGCTAGTCAATGTCGTTCTAAATTTGATAAAAATGGGCAACCATTGTCGGGAAACGAGCAAAGGGGCCAGC
CTCAGGCCCCACAACAAACTGGGGCATTCCCAATTCAGCCATTTGTTCCTCAGGGTTTTCAGGGACAACAACCCCCACTGTCCCAAGTGTTTCAGGG
AATAAGCCAGTTACCACAATACAACAATTGTCCCCCGCCACAAGCGGCAGTGCAGCAGTAG

SEQ ID 3

ATGGGGCAAACTAAAAGTAAAACTAAAAGTAAATATGCCTCTTATCTCAGCTTTATTAAAAATTCTTTTAAAAAGAGGGGGAGTTAGAGTATCTACAA
AAAATCTAATCAAGCTATTTCAAATAATAGAACAATTTTGCCCATGGTTTCCAGAACAAGGAACTTTAGATCTAAAAGATTGGAAAAGAATTGGCGA
GGAACTAAAACAAGCAGGTAGAAAGGGTAATATCATTCCACTTACAGTATGGAATGATTGGGCCATTATTAAAGCAGCTTTAGAACCATTTCAAACA
AAAGAAGATAGCGTTTCAGTTTCTGATGCCCCTGGAAGCTGTGTAATAGATTGTAATGAAAAGACAGGGAGAAAATCCCAGAAAGAAACAGAAAGTT
TACATTGCGAATATGTAACAGAGCCAGTAATGGCTCAGTCAACGCAAAATGTTGACTATAATCAATTACAGGGGGTGATATATCCTGAAACGTTAAA
ATTAGAAGGAAAAGGTCCAGAATTAGTGGGGCCATCAGAGTCTAAACCACGAGGGCCAAGTCCTCTTCCAGCAGGTCAGGTGCCCGTAACATTACAA
CCTCAAACGCAGGTTAAAGAAAATAAGACCCAACCGCCAGTAGCTTATCAATACTGGCCGCCGGCTGAACTTCAGTATCTGCCACCCCCAGAAAGTC
AGTATGGATATCCAGGAATGCCCCCAGCACTACAGGGCAGGGCGCCATATCCTCAGCCGCCCACTGTGAGACTTAATCCTACAGCATCACGTAGTGG
ACAAGGTGGTACACTGCACGCAGTCATTGATGAAGCCAGAAAACAGGGAGATCTTGAGGCATGGCGGTTCCTGGTAATTTTACAACTGGTACAGGCC
GGGGAAGAGACTCAAGTAGGAGCGCCTGCCCGAGCTGAGACTAGATGTGAACCTTTCACCATGAAAATGTTAAAAGATATAAAGGAAGGAGTTAAAC
AATATGGATCCAACTCCCCTTATATAAGAACATTATTAGATTCCATTGCTCATGGAAATAGACTTACTCCTTATGACTGGGAAAGTTTGGCCAAATC

TTCCCTTTCATCCTCTCAGTATCTACAGTTTAAAACCTGGTGGATTGATGGAGTACAAGAACAGGTACGAAAAAATCAGGCTACTAAGCCCACTGTT
AATATAGACGCAGACCAATTGTTAGGAACAGGTCCAAATTGGAGCACCATTAACCAACAATCAGTGATGCAGAATGAGGCTATTGAACAAGTAAGGG
CTATTTGCCTCAGGGCCTGGGGAAAAATTCAGGACCCAGGAACAGCTTTCCCTATTAATTCAATTAGACAAGGCTCTAAAGAGCCATATCCTGACTT
TGTGGCAAGATTACAAGATGCTGCTCAAAAGTCTATTACAGATGACAATGCCCGAAAAGTTATTGTAGAATTAATGGCCTATGAAAATGCAAATCCA
GAATGTCAGTCGGCCATAAAGCCATTAAAAGGAAAAGTTCCAGCAGGAGTTGATGTAATTACAGAATATGTGAAGGCTTGTGATGGGATTGGAGGAG
CTATGCATAAGGCAATGCTAATGGCTCAAGCAATGAGGGGGCTCACTCTAGGAGGACAAGTTAGAACATTTGGGAAAAAATGTTATAATTGTGGTCA
AATCGGTCATCTGAAAAGGAGTTGCCCAGTCTTAAATAAACAGAATATAATAAATCAAGCTATTACAGCAAAAAATAAAAAGCCATCTGGCCTGTGT
CCAAAATGTGGAAAAGGAAAACATTGGGCCAATCAATGTCATTCTAAATTTGATAAAGATGGGCAACCATTGTCGGGAAACAGGAAGAGGGGCCAGC
CTCAGGCCCCCCAACAAACTGGGGCATTCCCAGTTCAACTGTTTGTTCCTCAGGGTTTTCAAGGACAACAACCCCTACAGAAAATACCACCACTTCA
GGGAGTCAGCCAATTACAACAATCCAACAGCTGTCCCGCGCCACAGCAGGCAGCGCCACAGTAG

SEQ ID 4

ATGGGGCAAACTAAAAGTAAAATTAAAAGTAAATATGCCTCTTATCTCAGCTTTATTAAAAATTCTTTTAAAAAGAGGGGGAGTTAAAGTATCTACAA
AAAATCTAATCAAGCTATTTCAAATAATAGAACAATTTTGCCCATGGTTTCCAGAACAAGGAACTTCAGATCTAAAAGATTGGAAAAGAATTGGTAA
GGAACTAAAACAAGCAGGTAGGAAGGGTAATATCATTCCACTTACAGTATGGAATGATTGGGCCATTATTAAAGCAGCTTTAGAACCATTTCAAACA
GAAGAAGATAGCATTTCAGTTTCTGATGCCCCTGGAAGCTGTTTAATAGATTGTAATGAAAACACAAGGAAAAAATCCCAGAAAGAAACCGAAAGTT
TACATTGCGAATATGTAGCAGAGCCGGTAATGGCTCAGTCAACGCAAAATGTTGACTATAATCAATTACAGGAGGTGATATATCCTGAAACGTTAAA
ATTAGAAGGAAAAGGTCCAGAATTAATGGGGGCCATCAGAGTCTAAACCACGAGGCACAAGTCCTCTTCCAGCAGGTCAGGTGCTCGTAAGATTACAA
CCTCAAAAGCAGGTTAAAGAAAATAAGACCCAACCGCAAGTAGCCTATCAATACTGCCGCTGGCTGAACTTCAGTATCGGCCACCCCCAGAAAGTCA
GTATGGATATCCAGGAATGCCCCCAGCACCACAGGGCAGGGCGCCATACCATCAGCCGCCCACTAGGAGACTTAATCCTATGGCACCACCTAGTAGA
CAGGGTAGTGAATTACATGAAATTATTGATAAATCAAGAAAGGAAGGAGATACTGAGGCATGGCAATTCCCAGTAA

SEQ ID 5

MGQTKSKIKSKYASYLSFIKILLKRGGVKVSTKNLIKLFQIIEQFCPWFPEQGTLDLKDWKRIGKELKQAGRKGNIIPLTVWNDWAIIKAALEPFQT
EEDSVSVSDAPGSCIIDCNENTRKKSQKETEGLHCEYVAEPVMAQSTQNVDYNQLQEVIYPETLKLEGKGPELVGPSESKPRGTSPLPAGQVPVTLQ
PQKQVKENKTQPPVAYQYWPPAELQYRPPPESQYGYPGMPPAPQGRAPYPQPPTRRLNPTAPPSRQGSKLHEIIDKSRKEGDTEAWQFPVTLEPMPP
GEGAQEGEPPTVEARYKSFSIKKLKDMKEGVKQYGPNSPYMRTLLDSIAHGHRLIPYDWEILAKSSLSPSQFLQFKTWWIDGVQEQVRRNRAANPPV
NIDADQLLGIGQNWSTISQQALMQNEAIEQVRAICLRAWEKIQDPGSTCPSFNTVRQGSKEPYPDFVARLQDVAQKSIADEKARKVIVELMAYENAN
PECQSAIKPLKGKVPAGSDVISEYVKACDGIGGAMYKAMLMAQAITGVVLGGQVRTFGRKCYNCGQIGHLKKNCPVLNKQNITIQATTTGREPPDLC
PRCKKGKHWASQCRSKFDKNGQPLSGNEQRGQPQAPQQTGAFPIQPFVPQGFQGQQPPLSQVFQGISQLPQYNNCPPPQAAVQQ

SEQ ID 6

MGQTKSKTKSKYASYLSFIKILLKRGGVRVSTKNLIKLFQIIEQFCPWFPEQGTLDLKDWKRIGEELKQAGRKGNIIPLTVWNDWAIIKAALEPFQT
KEDSVSVSDAPGSCVIDCNEKTGRKSQKETESLHCEYVTEPVMAQSTQNVDYNQLQGVIYPETLKLEGKGPELVGPSESKPRGPSPLPAGQVPVTLQ
PQTQVKENKTQPPVAYQYWPPAELQYLPPPESQYGYPGMPPALQGRAPYPQPPTVRLNPTASRSGQGGTLHAVIDEARKQGDLEAWRFLVILQLVQA
GEETQVGAPARAETRCEPFTMKMLKDIKEGVKQYGSNSPYIRTLLDSIAHGNRLTPYDWESLAKSSLSSSQYLQFKTWWIDGVQEQVRKNQATKPTV
NIDADQLLGTGPNWSTINQQSVMQNEAIEQVRAICLRAWGKIQDPGTAFPINSIRQGSKEPYPDFVARLQDAAQKSITDDNARKVIVELMAYENANP
ECQSAIKPLKGKVPAGVDVITEYVKACDGIGGAMHKAMLMAQAMRGLTLGGQVRTFGKKCYNCGQIGHLKRSCPVLNKQNIINQAITAKNKKPSGLC
PKCGKGKHWANQCHSKFDKDGQPLSGNRKRGQPQAPQQTGAFPVQLFVPQGFQGQQPLQKIPPLQGVSQLQQSNSCPAPQQAAPQ

SEQ ID 7

MGQTKSKIKSKYASYLSFIKILLKRGGVKVSTKNLIKLFQIIEQFCPWFPEQGTSDLKDWKRIGKELKQAGRKGNIIPLTVWNDWAIIKAALEPFQT
EEDSISVSDAPGSCLIDCNENTRKKSQKETESLHCEYVAEPVMAQSTQNVDYNQLQEVIYPETLKLEGKGPELMGPSESKPRGTSPLPAGQVLVRLQ
PQKQVKENKTQPQVAYQYCRWLNFSIGHPQKVSMDIQECPQHHRAGRHTISRPLGDLILWHHLVDRVVNYMKLLINQERKEILRHGNSQ

SEQ ID 8

MPPAPQGRAPYHQPPTRRLNPMAPPSRQGSELHEIIDKSRKEGDTEAWQFPVTLEPMPPGEGAQEGEPPTVEARYKSFSIKMLKDMKEGVKQYGPNS
PYMRTLLDSIAYGHRLIPYDWEILAKSSLSPSQFLQFKTWWIDGVQEQVRRNRAANPPVNIDADQLLGIGQNWSTISQQALMQNEAIEQVRAICLRA
WEKIQDPGSTCPSFNTVRQGSKEPYPDFVARLQDVAQKSIADEKAGKVIVELMAYENANPECQSAIKPLKGKVPAGSDVISEYVKACDGIGGAMHKA
MLMAQAITGVVLGGQVRTFGGKCYNCGQIGHLKKNCPVLNKQNITIQATTTGREPPDLCPRCKKGKHWASQCRSKFDKNGQPLSGNEQRGQPQAPQQ
TGAFPIQPFVPQGFQGQQPPLSQVFQGISQLPQYNNCPSPQAAVQQ

SEQ ID 9

MGQTKSKIKSKYASYLSFIKILLKRGGVKVSTKNLIKLFQIIEQFCPWFPEQGTLDLKDWKRIGKELKQAGRKGNIIPLTVWNDWAIIKAALEPFQT
EEDSVSVSDAPGSCIIDCNENTGKKSQKETEGLHCEYVAEPVMAQSTQNVDYNQLQEVIYPETLKLEGKGPELVGPSESKPRGTSPLPAGQVPVTLQ
PQKQVKENKTQPPVAYQYWPPAELQYRPPPESQYGYPGMPPAPQGRAPYPQPPTRRLNPTAPPSRQGSKLHEIIDKSRKEGDTEAWQFPVTLEPMPP
GEGAQEGEPPTVEARYKSFSIKKLKDMKEGVKQYGPNSPYMRTLLDSIAHGHRLIPYDWEIQAKSSLSPSQFLQFKTWWIDGVQEQVRRNRAANPPV
NIDADQLLGIGQNWSTISQQALMQNEAIEQVRAICLRAWEKIQDPGSTCPSFNTVRQGSKEPYPDFVARLQDVAQKSIADEKARKVIVELMAYENAN
PECQSAIKPLKGKVPAGSDVISEYVKACDGIGGAMHKAMLMAQAITGVVLGGQVRTFGRKCYNCGQIGHLKKNCPVLNKQNITIQATTTGREPPDLC
PRCKKGKHWASQCRSKFDKNGQPLSGNEQRGQPQAPQQTGAFPIQPFVPQGFQGQQPPLSQVFQGISQLPQYNNCPPPQAAVQQ

SEQ ID 10

ATGGGCAACCATTGTCGGGAAACGAGCAAAGGGGCCAGCCTCAGGCCCCACAACAAACTGGGGCATTCCCAATTCAGCCATTTGTTCCTCAGGGTTT
TCAGGGACAACAACCCCCACTGTCCCAAGTGTTTCAGGGAATAAGCCAGTTACCACAATACAACAATTGTCCCCCGCCACAAGCGGCAGTGCAGCAG
TAGATTTATGTACTATACAAGCAGTCTCTCTGCTTCCAGGGGAGCCCCCACAAAAAACCCCCACAGGGGTATATGGACCCCTGCCTAAGGGGACTGT
AGGACTAATCTTGGGACGATCAAGTCTAAATCTAAAAGGAGTTCAAATTCATACTAGTGTGGTTGATTCAGACTATAAAGGCGAAATTCAATTGGTT
ATTAGCTCTTCAATTCCTTGGAGTGCCAGTCCAAGAGACAGGATTGCTCAATTATTACTCCTGCCATACATTAAGGGTGGAAATAGTGAAATAAAAA
GAATAGGAGGGCTTGGAAGCACTGATCCAACAGGAAAGGCTGCATATTGGGCAAGTCAGGTCTCAGAGAACAGACCTGTGTGTAAGGCCATTATTCA
AGGAAAACAGTTTGAAGGGTTGGTAGACACTGGAGCAGATGTCTCTATCATTGCTTTAAATCAGTGGCCAAAAAATTGGCCTAAACAAAAGGCTGTT
ACAGGACTTGTCGGCATAGGCACAGCCTCAGAAGTGTATCAAAGTACGGAGATTTTACATTGCTTAGGGCCAGATAATCAAGAAAGTACTGTTCAGC
CAATGATTACTTCAATTCCTCTTAATCTGTGGGGTCGAGATTTATTACAACAATGGGGTGCGGAAATCACCATGCCCGCTCCATCATATAGCCCCAC
GAGTCAAAAAATCATGACCAAGATGGGATATATACCAGGAAAGGGACTAGGGAAAAATGAAGATGGCATTAAAATTCCAGTTGAGGCTAAAATAAAT
CAAGAAAGAGAAGGAATAGGGAATCCTTGC

SEQ ID 11

ATGGGCAACCATTGTCGGGAAACAGGAAGAGGGGCCAGCCTCAGGCCCCCCAACAAACTGGGGCATTCCCAGTTCAACTGTTTGTTCCTCAGGGTTT
TCAAGGACAACAACCCCTACAGAAAATACCACCACTTCAGGGAGTCAGCCAATTACAACAATCCAACAGCTGTCCCGCGCCACAGCAGGCAGCGCCA
CAGTAGATTTATGTTCCACCCAAATGGTCTCTTTACTCCCTGGAGAGCCCCCACAAAAGATTCCTAGAGGGGTATATGGCCCGCTGCCAGAAGGGAG
GGTAGGCCTTATTTTAGGGAGATCAAGTCTAAATTTGAAGGGAGTCCAAATTCATACTGGGGTAATTTATTCAGATTATAAAGGGGGAATTCAGTTA
GTGATCAGCTCCACTGTTCCCTGGAGTGCCAATCCAGGTGATAGAATTGCTCAATTACTGCTTTTGCCTTATGTTAAAATTGGGGAAAACAAAACGG
AAAGAACAGGAGGGTTTGGAAGTACCAACCCTGCAGGAAAAGCCACTTATTGGGCTAATCAGGTCTCAGAGGATAGACCCGTGTGTACAGTCACTAT
TCAGGGAAAGAGTTTGAAGGATTAGTGGATACCCAGGCTGATGTTTCTATCATCGGCATAGGCACCGCCTCAGAAGTGTATCAAAGTGCCATGATTT
TACATTGTCTAGGATCTGATAATCAAGAAAGTACGGTTCAGCCTATGATCACTTCTATTCCAATCAATTTATGGGGCCGAGACTTGTTACAACAATG
GCATGCAGAGATTACTATCCCAGCCTCCCTATACAGCCCCAGGAATCAAAAAATCATGACTAAAATGGGATAGCTCCCTAAAAAGGGACTAGGAAAG
AATGAAGATGGCATTAAAGTCCCAACTGAGGCTGAAAAAAATCAAAAAAAGAAAAGGAATAGGGCATCCTTTTTAGAAGCGGTCACTGTAGAGCCTC
CAAAACCCATTCCATTAATTTGGGGGGAAAAAAA

SEQ ID 12

ATGGAGATTTTACATTGCTTAGGGCCAGATAATCAAGAAAGTACTGTTCAGCCAATGATTACTTCAATTCCTCTTAATCTGTGGGGTCGAGATTTAT
TACAACAATGGGGTGCGGAAATCACCATGCCCGCTCCATTATATAGCCCCACGAGTCAAAAAATCATGACCAAGATGGGATATATACCAGGAAAGGG
ACTAGGGAAAAATGAAGATGGCATTAAAGTTCCAGTTGAGGCTAAAATAAATCAAGAAAGAGAAGGAATAGGGTATCCTTTTTAG

SEQ ID 13

MEILHCLGPDNQESTVQPMITSIPLNLWGRDLLQQWGAEITMPAPLYSPTSQKIMTKMGYIPGKGLGKNEDGIKVPVEAKINQEREGIGYPF

SEQ ID 14

WATIVGKRAKGPASGPTTNWGIPNSAICSSGFSGTTTPTVPSVSGNKPVTTIQQLSPATSGSAAVDLCTIQAVSLLPGEPPQKTPTGVYGPLPKGTV
GLILGRSSLNLKGVQIHTSVVDSDYKGEIQLVISSSIPWSASPRDRIAQLLLLPYIKGGNSEIKRIGGLGSTDPTGKAAYWASQVSENRPVCKAIIQ
GKQFEGLVDTGADVSIIALNQWPKNWPKQKAVTGLVGIGTASEVYQSTEILHCLGPDNQESTVQPMITSIPLNLWGRDLLQQWGAEITMPAPSYSPT
SQKIMTKMGYIPGKGLGKNEDGIKIPVEAKINQEREGIGNPC

SEQ ID 15

ATGGCATTAAAATTCCAGTTGAGGCTAAAATAAATCAAGAAAGAGAAGGAATAGGGAATCCTTGCTAGGGGCGGCCACTGTAGAGCCTCCTAAACCC
ATACCATTAACTTGGAAAACAGAAAAACCAGTGTGGGTAAATCAGTGGCCGCTACCAAAACAAAAACTGGAGGCTTTACATTTATTAGCAAATGAAC
AGTTAGAAAAGGGTCATATTGAGCCTTCGTTCTCACCTTGGAATTCTCCTGTGTTTGTAATTCAGAAGAAATCAGGCAAATGGCGTATGTTAACTGA
CTTAAGGGCTGTAAACGCCGTAATTCAACCCATGGGGCCTCTCCAACCCGGGTTGCCCTCTCCGGCCATGATCCCAAAAGATTGGCCTTTAATTATA
ATTGATCTAAAGGATTGCTTTTTTTACCATCCCTCTGGCAGAGCAGGATTGCGAAAAATTTGCCTTTACTATACCAGCCATAAATAATAAAGAACCAG
CCACCAGGTTTCAGTGGAAAGTGTTACCTCAGGGAATGCTTAATAGTCCAACTATTGTCAGACTTTTGTAGGTCGAGCTCTTCAACCAGTTAGAGA
AAAGTTTTCGACTGTTATATTATTCATTGTATTGATGATATTTTATGTGCTGCAGAAACGAAAGATAAATTAATTGACTGTTATACATTTCTGCAA
GCAGAGGTTGCCAATGCTGGACTGCAATAGCATCTGATAAGATCCAAACCTCTACTCCTTTTCATTATTTAGGGATGCAGATAGAAAATAGAAAAA
TTAAGCCACAAAAATAGAAATAAGAAAAGACACATTAAAAACACTAAATGATTTTCAAAAATTACTAGGAGATATTAATTGGATTCGGCCAACTCT
AGGCATTCCTACTTATGCCATGTCAAATTTGTTCTCTATCTTAAGAGGAGACTCAGACTTAAATAGTAAAGAATGTTAACCCCAGAGGCAACAAAA
GAAATTAAATTAGTGGAAGAAAAAATTCAGTCAGCGCAAATAAATAGAATAGATCCCTTAGCCCCACTCCAACTTTTGATTTTTGCCACTGCACATT
CTCCAACAGGCATCATTATTCAAAATACTGATCTTGTGGAGTGGTCATTCCTTCCTCACAGTACAGTTAAGACTTTTACATTGTACTTGGATCAAAT
AGCTACATTAATCGGTCAGACAAGATTACGAATAATAAAATTATGTGGGAATGACCCAGACAAAATAGTTGTCCCTTTAACCAAGGAACAAGTTAGA
CAAGCCTTTATCAATTCTGGTGCATGGAAGATTGGTCTTGCTAATTTTGTGGGAATTATTGATAATCATTACCCAAAAACAAAGATCTTCCAGTTCT
TAAAATTGACTACTTGGATTCTACCTAAAATTACCAGACGTGAACCTTTAGAAAATGCTCTAACAGTATTTACTGATGGTTCCAGCAATGGAAAAGC
AGCTTACACAGGACCGAAAGAACGAGTAATCAAAACTCCATATCAATCGGCTCAAAGAGCAGAGTTGGTTGCAGTCATTACAGTGTTACAAGATTTT
GACCAACCTATCAATATTATATCAGATTCTGCATATGTAGTACAGGCTACAAGGGATGTTGAGACAGCTCTAATTAAATATAGCATGGATGATCAGT
TAAACCAGCTATTCAATTTATTACAACAAACTGTAAGAAAAAGAAATTTCCCATTTTATATTACACATATTCGAGCACACACTAATTTACCAGGGCC
TTTGACTAAAGCAAATGAACAAGCTGACTTACTGGTATCATCTGCACTCATAAAAGCACAAGAACTTCATGCTTTGACTCATGTAAATGCAGCAGGA
TTAAAAAACAAATTTGATGTCACATGGAAACAGGCAAAAGATATTGTACAACATTGCACCCAGTGTCAAGTCTTACACCTGCCCACTCAAGAGGCAG
GAGTTAATCCCAGAGGTCTGTGTCCTAATGCATTATGGCAAATGGATGTCACGCATGTACCTTCATTTGGAAGATTATCATATGTTCACGTAACAGT

TGATACTTATTCACATTTCATATGGGCAACTTGCCAAACAGGAGAAAGTACTTCCCATGTTAAAAAACATTTATTGTCTTGTTTTGCTGTAATGGGA
GTTCCAGAAAAAATCAAAACTGACAATGGACCAGGATATTGTAGTAAAGCTTTCCAAAAATTCTTAAGTCAGTGGAAAATTTCACATACAACAGGAA
TTCCTTATAATTCCCAAGGACAGGCCATAGTTGAAAGAACTAATAGAACACTCAAAACTCAATTAGTTAAACAAAAAGAAGGGGGAGACAGTAAGGA
GTGTACCACTCCTCAGATGCAACTTAATCTAGCACTCTATACTTTAAATTTTTTAAACATTTATAGAAATCAGACTACTACTTCTGCAGAACAACAT
CTTACTGGTAAAAGAACAGCCCACATGAAGGAAAACTAATTTGGTGGAAAGATAATAAAAATAAGACATGGGAAATAGGGAAGGTGATAACGTGGG
GGAGAGGTTTTGCTTGTGTTTCACCAGGAGAAAATCAGCTTCCTGTTTGGATACCCACTAGACATTTGAAGTTCTACAATGAACCCATCAGAGATGC
AAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGTCAGAAGAACAGATGAAGTT
GCCATCCACCAAGAAGGCAGAGCCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAAATATCTAGAGAACACAAAGGTGACACAA
ACCCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCAGGAGCAGCTGCAGC

SEQ ID 16
ATGTTAACTGACTTAAGGGCTGTAAACGCCGTAATTCAACCCATGGGGCCTCTCCAACCCGGGTTGCCCTCTCCGGCCATGATCCCAAAAGATTGGC
CTTTAATTATAATTGATCTAAAGGATTGCTTTTTTACCATCCCTCTGGCAGAGCAGGATTGCGAAAAATTTGCCTTTACTATACCAGCCATAAATAA
TAAAGAACCAGCCACCAGGTTTCAGTGGAAAGTGTTACCTCAGGGAATGCTTAATAGTCCAACTATTTGTCAGACTTTTGTAGGTCGAGCTCTTCAA
CCAGTTAGAGAAAAGTTTTCAGACTGTTATATTATTCATTGTATTGATGATATTTATGTGCTGCAGAAACGAAAGATAAATTAATTGACTGTTATA
CATTTCTGCAAGCAGAGGTTGCCAATGCTGGACTGGCAATAGCATCTGATAAGATCCAAACCTCTACTCCTTTTCATTATTTAGGGATGCAGATAGA
AAATAGAAAATTAAGCCACAAAAAATAGAAATAAGAAAAGACACATTAAAAACACTAAATGATTTTCAAAAATTACTAGGAGATATTAATTGGATT
CGGCCAACTCTAGGCATTCCTACTTATGCCATGTCAAATTTGTTCTCTATCTTAAGAGGAGACTCAGACTTAAATAGTAAAGAATGTTAACCCCAG
AGGCAACAAAAGAAATTAAATTAGTGGAAGAAAAAATTCAGTCAGCGCAAATAAATAGAATAGATCCCTTAGCCCCACTCCAACTTTTGATTTTTGC
CACTGCACATTCTCCAACAGGCATCATTATTCAAAATACTGATCTTGTGGAGTGGTCATTCCTTCCTCACAGTACAGTTAAGACTTTTACATTGTAC
TTGGATCAAATAGCTACATTAATCGGTCAGACAAGATTACGAATAATAAAATTATGTGGGAATGACCCAGACAAAATAGTTGTCCCTTTAACCAAGG
AACAAGTTAGACAAGCCTTTATCAATTCTGGTGCATGGAAGATTGGTCTTGCTAATTTTGTGGGAATTATTGATAATCATTACCCAAAAACAAAGAT
CTTCCAGTTCTTAAAATTGACTACTTGGATTCTACCTAAAATTACCAGACGTGAACCTTTAGAAATGCTCTAACAGTATTTACTGATGGTTCCAGC
AATGGAAAAGCAGCTTACACAGGACCGAAAGAACGAGTAATCAAAACTCCATATCAATCGGCTCAAAGAGCAGAGTTGGTTGCAGTCATTACAGTGT
TACAAGATTTTGACCAACCTATCAATATTATATCAGATTCTGCATATGTAGTACAGGCTACAAGGGATGTTGAGACAGCTCTAATTAAATATAGCAT
GGATGATCAGTTAAACCAGCTATTCAATTTATTACAACAAACTGTAAGAAAAAGAAATTTCCCATTTTATATTACACATATTCGAGCACACACTAAT
TTACCAGGGCCTTTGACTAAAGCAAATGAACAAGCTGACTTACTGGTATCATCTGCACTCATAAAAGCACAAGAACTTCATGCTTTGACTCATGTAA
ATGCAGCAGGATTAAAAAACAAATTTGATGTCACATGGAAACAGGCAAAAGATATTGTACAACATTGCACCCAGTGTCAAGTCTTACACCTGCCCAC
TCAAGAGGCAGGAGTTAATCCCAGAGGTCTGTGTCCTAATGCATTATGGCAAATGGATGTCACGCATGTACCTTCATTTGGAAGATTATCATATGTT
CACGTAACAGTTGATACTTATTCACATTTCATATGGGCAACTTGCCAAACAGGAGAAAGTACTTCCCATGTTAAAAAACATTTATTGTCTTGTTTTG
CTGTAATGGGAGTTCCAGAAAAAATCAAAACTGACAATGGACCAGGATATTGTAGTAAAGCTTTCCAAAAATTCTTAAGTCAGTGGAAAATTTCACA
TACAACAGGAATTCCTTATAATTCCCAAGGACAGGCCATAGTTGAAAGAACTAATAGAACACTCAAAACTCAATTAGTTAAACAAAAAGAAGGGGGA
GACAGTAAGGAGTGTACCACTCCTCAGATGCAACTTAATCTAGCACTCTATACTTTAAATTTTTTAAACATTTATAGAAATCAGACTACTACTTCTG
CAGAACAACATCTTACTGGTAAAAGAACAGCCCACATGAAGGAAAACTAATTTGGTGGAAAGATAGTAAAAATAAGACATGGGAAATAGGGAAGGT
GATAACGTGGGGGGAGAGGTTTTGCTTGTGTTTCACCAGGAGAAAATCAGCTTCCTGTTTGGATACCCACTAGACATTTGAAGTTCTACAATGAACCC
ATCAGAGATGCAAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGTCAGAAGAA
CAGATGAAGTTGCCATCCACCAAGAAGGCAGAGCCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAAATATCTAGAGAACACAA
AGGTGACACAAACCCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCAGGAGCAGCTGCAGCTAA

SEQ ID 17
ATGGCATTAAAGTCCCAACTGAGGCTGAAAAAAATCAAAAAAAGAAAAGGAATAGGGCATCCTTTTTTAGAAGCGGTCACTGTAGAGCCTCCAAAACC
CATTCCATTAATTTGGGGGGAAAAAAAAAAACTGTATGGTAAATCAGTAGCCGCTTCCAAAACAAAAACTGGAGGCTTTACACTTATTAGCAAAGAAA
CAGTTAGAAAAAGGACATATTGAGCCTTCATTTTCGCCTTGGAATTCTCCTGTTTGTAATTCAGAAAAAATCCGGCAGATGGCGTATGCTAACTGAC
TTAAGAGCCATTAATGCCATAATTCAACCCATGGGGGCTCTCCCATCCCGGTTGCCCTCTCCAGCCATGGTCCCCTTTAATTATAATTGATCTGAAG
GATTGCTTTTTTACCATTCCTCTGGCAAAGAGGGATTTTGAAAAATTTGCTTTTACTATACCAGCCTAAATAATAAAGAACCAGCCACCAGGTTTCA
GTGGAAAGTATTGCCTCAGGGAATGCTTAATAATTCAACTATTTGTCAGACTTTCATAGCTCAAGCTCTGCAACCAGTTAGAGACAAGTTTTCAGAC
TGTTATATCGTTCATTATGTTGATATTTTGTGTGCTGCAGAAACGAGAGACAAATTAATTGACCGTTACACATTTCTCAGACAGAGGTTGCCAACGC
GGGACTGACAATAGCATCTGATAAGATTCAAACCTCTCCTCCTTTCCATTACTTGGGAATGCAGGTAGAGGAAAGGAAAATTAAACCACAAAAAATA
GAAATAAGAAAAGACACATTAAAAACATTAAATGAGTTTCAAAAGTTGGTAGGAGATACTAATTGGATTCGGAGATATTAATTGGATTTGGCCAACT
CTAGGCATTCCTACTTATGCCATGTCAATTTGTTCTCTTTCTTAAGAGGGGACTTGGAATTAAATAGTGAAGAATGTTACCTCCAGAGGCAACTA
AAGAAATTAAATTAATTGAAGAAAAAATTCGGTCAGCACAAGTAAATAGGATCACTTGGCCCCACTCCAAATTTTGATTTTTGGTACTGCACATTC
TCTAACAGCCATCATTGTTCAAAACACAGATCTTGTGGATTGGTCCTTCCTTCCTCATAGTACAATTAAGACTTTTACATTGTACTTGGATCAAATG
GCTACATTAATTGGTCAGGGAAGATTACGAATAATAACATTGTGTGGAAATGACCCAGATAAAATCACTGTTCCTTTCAACAAGCAACAAGTTAGAC
AAGCCTTTATCAGTTCTGGTGCATGGAAGATTGGTCTTGCTAATTTTTCTGGGAATTATTGATAATCATTACCCAAAAACAAAAATCTTCCAGTTCTT
AAAATTGACTACTTGGATTCTACCTAAAATTACCAGACGTGAACCTTTAGAAAATGCTCTAACAGTATTTACTGATGGTTCCAGCAATGGAAAAGCG
GCTTACACAGGGCCGAAAGAACGAGTAATCAAAACTCCGTATCAATCAGCTCAAAGAGCAGAGTTGGTTGCAGTCATTACAGTGTTACAAGATTTTG
ACCAACCTATCAATATTATATCAGATTCTGCATATGTAGTACAGGCTACAAGGGATGTTGAGACAGCTCTAATTAAATATAGCACGGACGATCATTT
AAACCAGCTATTCAATTTATTACAACAAACTGTAAGAAAAAGAAATTTCCCATTTTATATTACTCATATTCGAGCACACACTAATTTACCAGGGCCT
TTGACTAAAGCAAATGAACAAGCTGACTTACTGGTATCATCTGCATTCATAAAAGCACAAGAACTTCTTGCTTTGACTCATGTAAATGCAGCAGGAT

TAAAAAACAAATTTGATGTCACATGGAAACAGGCAAAAGATATTGTACAACATTGCACCCAGTGTCAAGTCTTACACCTGTCCACTCAAGAGGCAGG
AGTTAATCCCAGAGGTCTGTGTCCTAATGCGTTATGGCAAATGGATGGCACGCATGTTCCTTCATTTGGAAGATTATCATATGTTCATGTAACAGTT
GATACTTATTCACATTTCATATGGGCAACTTGCCAAACAGGAGAAAGTACTTCCCATGTTAAAAAACATTTATTATCTTGTTTTGCTGTAATGGGAG
TTCCAGAAAAAATCAAAACTGACAATGGACCAGGATATTGTAGTAAAGCTTTCCAAAAATTCTTAAGTCAGTGGAAAATTTCACATACAACAGGAAT
TCCTTATAATTCCCAAGGACAGGCCATAGTTGAAAGAACTAATAGAACACTCAAAACTCAATTAGTTAAACAAAAAGAAGGGGGAGACAGTAAGGAG
TGTACCACTCCTCAGATGCAACTTAATCTAGCACTCTATACTTTAAATTTTTTAAACATTTATAGAAATCAGACTACTACTTCTGCAAAACAACATC
TTACTGGTAAAAAGCACAGCCCACATGAAGGAAAACTAATTTGGTGGAAAGATAATAAAAATAAGACATGGGAAATAGGGAAGGTGATAACGTGGGG
GAGAGGTTTTGCTTGTGTTTCACCAGGAGAAAATCAGCTTCCTGTTTGGATACCCACTAGACATTTGAAGTTCTACAATGAACCCATCGGAGATGCA
AAGAAAAGGGCCTCCACAGAGATGGTAACCCCAGTCACATGGATGGATAATC

SEQ ID 18

ATGGGGCCTCTCCAACCCGGGTTGCCCTCTCCGGCCATGATCCCAAAAGATTGGCCTTTAATTATAATTGATCTAAAGGATTGCTTTTTTACCATCC
CTCTGGCAGAGCAGGATTGTGAAAAATTTGCCTTTACTATACCAGCCATAAATAATAAAGAACCAGCCACCAGGTTTCAGTGGAAAGTGTTACCTCA
GGGAATGCTTAATAGTCCAACTATTTGTCAGACTTTTGTAGGTCGAGCTCTTCAACCAGTGAGAGAAAAGTTTTCAGACTGTTATATTATTCATTAT
ATTGATGATATTTTATGTGCTGCAGAAACGAAAGATAAATTAATTGACTGTTATACATTTCTGCAAGCAGAGGTTGCCAATGCTGGACTGGCAATAG
CATCCGATAAGATCCAAACCTCTACTCCTTTTCATTATTTAGGGATGCAGATAGAAAATAGAAAAATTAAGCCACAAAAAATAGAAATAAGAAAAGA
CACATTAAAAACACTAAATGATTTTCAAAAATTACTAGGAGATATTAATTGGATTCGGCCAACTCTAGGCATTCCTACTTATGCCATGTCAAATTTG
TTCTCTATCTTAAGAGGAGACTCAGACTTAAATAGTCAAAGAATATTAACCCCAGAGGCAACAAAAGAAATTAAATTAGTGGAAGAAAAAATTCAGT
CAGCGCAAATAAATAGAATAGATCCCTTAGCCCCACTCCAACTTTTGATTTTTGCCACTGCACATTCTCCAACAGGCATCATTATTCAAAATACTGA
TCTTGTGGAGTGGTCATTCCTTCCTCACAGTACAGTTAAGACTTTTTACATTGTACTTGGATCAAATAGCTACATTAATCGGTCAGACAAGATTACGA
ATAAACAAATTATGTGGAAATGACCCAGACAAAATAGTTGTCCCTTTAACCAAGGAACAAGTTAGACAAGCCTTTATCAATTCTGGTGCATGGCAGA
TTGGTCTTGCTAATTTTGTGGGACTTATTGATAATCATTACCCAAAAACAAAGATCTTCCAGTTCTTAAAATTGACTACTTGGATTCTACCTAAAAT
TACCAGACGTGAACCTTTAGAAAATGCTCTAACAGTATTTACTGATGGTTCCAGCAATGGAAAAGCAGCTTACACAGGGCCGAAAGAACGAGTAATC
AAAACTCCATATCAATCGGCTCAAAGAGACGAGTTGGTTGCAGTCATTACAGTGTTACAAGATTTTGACCAACCTATCAATATTATATCAGATTCTG
CATATGTAGTACAGGCTACAAGGGATGTTGAGACAGCTCTAATTAAATATAGCATGGATGATCAGTTAAACCAGCTATTCAATTTATTACAACAAAC
TGTAAGAAAAAGAAATTTCCCATTTTATATTACTTATATTCGAGCACACACTAATTTACCAGGGCCTTTGACTAAAGCAAATGAACAAGCTGACTTA
CTGGTATCATCTGCACTCATAAAAGCACAAGAACTTCATGCTTTGACTCATGTAAATGCAGCAGGATTAAAAAACAAATTTGATGTCACATGGAAAC
AGGCAAAAGATATTGTACAACATTGCACCCAGTGTCAAGTCTTACACCTGCCCACTCAAGAGGCAGGAGTTAATCCCAGAGGTCTGTGTCCTAATGC
ATTATGGCAAATGGATGGCACGCATGTACCTTCATTTGGAAGATTATCATATGTTCATGTAACAGTTGATACTTATTCACATTTCATATGGGCAACT
TGCCAAACAGGAGAAAGTACTTCCCATGTTAAAAAACATTTATTGTCTTGTTTTGCTGTAATGGGAGTTCCAGAAAAAATCAAAACTGACAATGGAC
CAGGATATTGTAGTAAAGCTTTCCAAAAATTCTTAAGTCAGTGGAAAATTTCACATACAACAGGAATTCCTTATAATTCCCAAGGACAGGCCATAGT
TGAAAGAACTAATAGAACACTCAAAACTCAATTAGTTAAACAAAAAGAAGGGGGAGACAGTAAGGAGTGTACCACTCCTCAGATGCAACTTAATCTA
GCACTCTATACTTTAAATTTTTTAAACATTTATAGAAATCAGACTACTACTTCTGCAGAACAACATCTTACTGGTAAAAAGAACAGCCCACATGAAG
GAAAACTAATTTGGTGGAAAGATAATAAAAATAAGACATGGGAAATAGGGAAGGTGATAACGTGGGGGAGAGGTTTTGCTTGTGTTTCACCAGGAGA
AAATCAGCTTCCTGTTTGGTTACCCACTAGACATTTGAAGTTCTACAATGAACCCATCGGAGATGCAAAGAAAAGGCCTCCACGGAGATGGTAACA
CCAGTCACATGGATGGATAATCCTATAGAAGTATATGTTAATGATAGTATATGGGTACCTGGCCCCATAGATGATCGCTGCCCTGCCAAACCTGAGG
AAGAAGGGATGATGATAAATATTTCCATTGGGTATCGTTATCCTCCTATTTGCCTAGGGAGAGCACCAGGATGTTTAATGCCTGCAGTCCAAAATTG
GTTGGTAGAAGTACCTACTGTCAGTCCCATCAGTAGATTCACTTATCACATGGTAAGCGGGATGTCACTCAGGCCACGGGTAAATTATTTACAAGAC
TTTTCTTATCAAAGATCATTAAAATTTAGACCTAAAGGGAAACCTTGCCCCAAGGAAATTCCCAAGAATCAAAAAAATACAGAAGTTTTAGTTTGGG
AAGAATGTGTGGCCAATAGTGCGGTGATATTATAAAACAATGAATTTGGAACTATTATAGATTGGGCACCTCGAGGTCAATTCTACCACAATTGCTC
AGGACAAACTCAGTCGTGTCCAAGTGCACAAGTGAGTCCAGCTGTTGATAGCGACTTAACAGAAAGTTTAGACAAACATAAGCATAAAAAATTGCAG
TCTTTCTACCCTTGGGAATGGGGAGAAAAAGGAATCTCTACCCCAAGACCAAAAATAGTAAGTCCTGTTTCTGGTCCTGAACATCCAGAATTATGGA
GGCTTACTGTGGCCTCACACCACATTAGAATTTGGTCTGAAATCAAACTTTAGAAACAAGAGATTGTAAGCCATTTTATACTGTCGACCTAAATTC
CAGTCTAACAGTTCCTTTACAAAGTTGCGTAAAGCCCCCTTATATGCTAGTTGTAGGAAATATAGTTATTAAACCAGACTCCCAGACTATAACCTGT
GAAAATTGTAGATTGCTTACTTGCATTGATTCAACTTTTAATTGGCAACACCGTATTCTGCTGGTGAGAGCAAGAGAGGGCGTGTGGATCCCTGTGT
CCATGGACCGACCGTGGGAGGCCTCACCATCCGTCCATATTTTGACTGAAGTATTAAAAGGTGTTTTAAATAGATCCAAAAGATTCATTTTTACTTT
AATTGCAGTGATTATGGGATTAATTGCAGTCACAGCTACGGCTGCTGTAGCAGGAGTTGCATTGCACTCTTCTGTTCAGTCAGTAAACTTTGTTAAT
GATTGGCAAAAGAATTCTACAAGATTGTGGAATTCACAATCTAGTATTGATCAAAAATTGGCAAATCAAATTAATGATCTTAGACAAACTGTCATTT
GGATGGGAGACAGACTCATGAGCTTAGAACATCGTTTCCAGTTACAATGTGACTGGAATACGTCAGATTTTGTATTACACCCCAAATTTATAATGA
GTCTGAGCATCACTGGGACATGGTTAGACGCCATCTACAGGGAAGAGAAGATAATCTCACTTTAGCATTTCCAAATTAAAAGAACAAATTTTCGAA
GCATCAAAAGCCCATTTAAATTTGGTGCCAGGAACTGAGGCAATTGCAGGAGTTGCTGATGGCCTCGCAAATCTTAACCCTGTCACTTGGGTTAAGA
CCATTGGAAGTACATCGATTATAAATCTCATATTAATCCTTGTGTGCCTGTTTTGTCTGTTGTTAGTCTGCAGGTGTACCCAACAGCTCCGAAGAGA
CAGCGACCATCGAGAACGGGCCATGATGACGATGGCGGTTTTGTCGAAAGAAAAGGGGGAAATGTGGGGAAAGCAAGAGAGATCAAATTGTTACT
GTGTCTGTGTAG

SEQ ID 19

MLTDLRAVNAVIQPMGPLQPGLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMLNSPTICQTFVGRALQ
PVREKFSDCYIIHCIDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQTSTPFHYLGMQIENRKIKPQKIEIRKDTLKTLNDFQKLLGDINWI
RPTLGIPTYAMSNLFSILRGDSDLNSKRMLTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIIQNTDLVEWSFLPHSTVKTFTLY

LDQIATLIGQTRLRIIKLCGNDPDKIVVPLTKEQVRQAFINSGAWKIGLANFVGIIDNHYPKTKIFQFLKLTTWILPKITRREPLENALTVFTDGSS
NGKAAYTGPKERVIKTPYQSAQRAELVAVITVLQDFDQPINIISDSAYVVQATRDVETALIKYSMDDQLNQLFNLLQQTVRKRNFPFYITHIRAHTN
LPGPLTKANEQADLLVSSALIKAQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVLHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYV
HVTVDTYSHFIWATCQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQGQAIVERTNRTLKTQLVKQKEGG
DSKECTTPQMQLNLALYTLNFLNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDSKNKTWEIGKVITWGRGFACVSPGENQLPVWIPTRHLKFYNEP
IRDAKKSTSAETETSQSSTVDSQDEQNGDVRRTDEVAIHQEGRAANLGTTKEADAVSYKISREHKGDTNPREYAACSLDDCINGGKSPYACRSSCS

SEQ ID 20
MGPLQPGLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMLNSPTICQTFVGRALQPVREKFSDCYIIHY
IDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQTSTPFHYLGMQIENRKIKPQKIEIRKDTLKTLNDFQKLLGDINWIRPTLGIPTYAMSNL
FSILRGDSDLNSQRILTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIIQNTDLVEWSFLPHSTVKTFTLYLDQIATLIGQTRLR
ITKLCGNDPDKIVVPLTKEQVRQAFINSGAWQIGLANFVGLIDNHYPKTKIFQFLKLTTWILPKITRREPLENALTVFTDGSSNGKAAYTGPKERVI
KTPYQSAQRDELVAVITVLQDFDQPINIISDSAYVVQATRDVETALIKYSMDDQLNQLFNLLQQTVRKRNFPFYITYIRAHTNLPGPLTKANEQADL
LVSSALIKAQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVLHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYVHVTVDTYSHFIWAT
CQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQGQAIVERTNRTLKTQLVKQKEGGDSKECTTPQMQLNL
ALYTLNFLNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDNKNKTWEIGKVITWGRGFACVSPGENQLPVWLPTRHLKFYNEPIGDAKKRASTEMVT
PVTWMDNPIEVYVNDSIWVPGPIDDRCPAKPEEEGMMINISIGYRYPPICLGRAPGCLMPAVQNWLVEVPTVSPISRFTYHMVSGMSLRPRVNYLQD
FSYQRSLKFRPKGKPCPKEIPKESKNTEVLVWEECVANSAVILXNNEFGTIIDWAPRGQFYHNCSGQTQSCPSAQVSPAVDSDLTESLDKHKHKKLQ
SFYPWEWGEKGISTPRPKIVSPVSGPEHPELWRLTVASHHIRIWSGNQTLETRDCKPFYTVDLNSSLTVPLQSCVKPPYMLVVGNIVIKPDSQTITC
ENCRLLTCIDSTFNWQHRILLVRAREGVWIPVSMDRPWEASPSVHILTEVLKGVLNRSKRFIFTLIAVIMGLIAVTATAAVAGVALHSSVQSVNFVN
DWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRLMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGREDNLTLDISKLKEQIFE
ASKAHLNLVPGTEAIAGVADGLANLNPVTWVKTIGSTSIINLILILVCLFCLLLVCRCTQQLRRDSDHRERAMMTMAVLSKRKGGNVGKSKRDQIVT
VSV

SEQ ID 21
NKSRKRRNRESLLGAATVEPPKPIPLTWKTEKPVWVNQWPLPKQKLEALHLLANEQLEKGHIEPSFSPWNSPVFVIQKKSGKWRMLTDLRAVNAVIQ
PMGPLQPGLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMLNSPTICQTFVGRALQPVREKFSDCYIIH
CIDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQTSTPFHYLGMQIENRKIKPQKIEIRKDTLKTLNDFQKLLGDINWIRPTLGIPTYAMSN
LFSILRGDSDLNSKRMLTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIIQNTDLVEWSFLPHSTVKTFTLYLDQIATLIGQTRL
RIIKLCGNDPDKIVVPLTKEQVRQAFINSGAWKIGLANFVGIIDNHYPKTKIFQFLKLTTWILPKITRREPLENALTVFTDGSSNGKAAYTGPKERV
IKTPYQSAQRAELVAVITVLQDFDQPINIISDSAYVVQATRDVETALIKYSMDDQLNQLFNLLQQTVRKRNFPFYITHIRAHTNLPGPLTKANEQAD
LLVSSALIKAQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVLHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYVHVTVDTYSHFIWA
TCQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQGQAIVERTNRTLKTQLVKQKEGGDSKECTTPQMQLN
LALYTLNFLNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDNKNKTWEIGKVITWGRGFACVSPGENQLPVWIPTRHLKFYNEPIRDAKKSTSAETE
TSQSSTVDSQDEQNGDVRRTDEVAIHQEGRAANLGTTKEADAVSYKISREHKGDTNPREYAACSLDDCINGGKSPYACRSSCS

SEQ ID 22
ATGAACCCATCAGAGATGCAAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGT
CAGAAGAACAGATGAAGTTGCCATCCACCAAGAAGGCAGAGCCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAAATATCTAGA
GAACACAAAGGTGACACAAACCCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCAGGAGCAGCT
GCAGCTAACTATACCTACTGGGCCTATGTGCCTTTCCCGCCCCTTAATTCGGGCAGTCACATGGATGGATAATCCTACAGAAGTATATGTTAATGATA
GTGTATGGGTACCTGGCCCCATAGATGATCGCTGCCCTGCCAAACCTGAGGAAGAAGGGATGATGATAAATATTTCCATTGGGTATCATTATCCTCC
TATTTGCCTAGGGAGAGCACCAGGATGTTTAATGCCTGCAGTCCAAAATTGGTTGGTAGAAGTACCTACTGTCAGTCCCATCTGTAGATTCACTTAT
CACATGGTAAGCGGGATGTCACTCAGGCCACGGGTAAATTATTTACAAGACTTTTCTTATCAAAGATCATTAAAATTTAGACCTAAAGGGAAACCTT
GCCCCAAGGAAATTCCCAAAGAATCAAAAAATACAGAAGTTTTAGTTTGGGAAGAATGTGTGGCCAATAGTGCGGTGATATTACAAAACAATGAATT
CGGAACTATTATAGATTGGGCACCTCGAGGTCAATTCTACCACAATTGCTCAGGACAAACTCAGTCGTGTCCAAGTGCACAAGTGAGTCCAGCTGTT
GATAGCGACTTAACAGAAAGTTTAGACAAACATAAGCATAAAAAATTGCAGTCTTTCTACCCTTGGGAATGGGGAGAAAAAGGAATCTCTACCCCAA
GACCAAAAATAGTAAGTCCTGTTTCTGGTCCTGAACATCCAGAATTATGGAGGCTTACTGTGGCCTCACACCACATTAGAATTGGTCTGGAAATCA
AACTTTAGAAACAAGAGATCGTAAGCCATTTTATACTATTGACCTGAATTCCAGTCTAACAGTTCCTTTACAAAGTTGCGTAAAGCCCCCTTATATG
CTAGTTGTAGGAAATATAGTTATTAAACCAGACTCCCAGACTATAACCTGTGAAAATTGTAGATTGCTTACTTGCATTGATTCAACTTTTAATTGGC
AACACCGTATTCTGCTGGTGAGAGCAAGAGAGGGCGTGTGGATCCCTGTGTCCATGGACCGACCGTGGGAGGCCTCGCCATCCGTCCATATTTTGAC
TGAAGTATTAAAAGGTGTTTTAAATAGATCCAAAAGATTCATTTTTACTTTAATTGCAGTGATTATGGGATTAATTGCAGTCACAGCTACGGCTGCT
GTAGCAGGAGTTGCATTGCACTCTTCTGTTCAGTCAGTAAACTTTGTTAATGATTGGCAAAAAAATTCTACAAGATTGTGGAATTCACAATCTAGTA
TTGATCAAAAATTGGCAAATCAAATTAATGATCTTAGACAAACTGTCATTTGGATGGGAGACAGACTCATGAGCTTAGAACATCGTTTCCAGTTACA
ATGTGACTGGAATACGTCAGATTTTTGTATTACACCCCAAATTTATAATGAGTCTGAGCATCACTGGGACATGGTTAGACGCCATCTACAGGGAAGA
GAAGATAATCTCACTTTAGACATTTCCAAATTAAAAGAACAAATTTTCGAAGCATCAAAAGCCCATTTAAATTTGGTGCCAGGAACTGAGGCAATTG
CAGGAGTTGCTGATGGCCTCGCAAATCTTAACCCTGTCACTTGGGTTAAGACCATTGGAAGTACTACGATTATAAATCTCATATTAATCCTTGTGTG
CCTGTTTTGTCTGTTGTTAGTCTGCAGGTGTACCCAACAGCTCCGAAGAGACAGCGACCA

SEQ ID 23

ATGCAAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGTCAGAAGAACAGATGA
AGTTGCCATCCACCAAGAAGGCAGAGCCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAAATATCTAGAGAACACAAAGGTGAC
ACAAACCCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCAGGAGCAGCTGCAGCTAACTATACC
TACTGGGCCTATGTGCCTTTCCCGCCCCTTAATTCGGGCAGTCACATGGATGGATAATCCTACAGAAGTATATGTTAATGATAGTGTATGGGTACCTG
GCCCCATAGATGATCGCTGCCCTGCCAAACCTGAGGAAGAAGGGATGATGATAAATATTTCCATTGGGTATCATTATCCTCCTATTTGCCTAGGGAG
AGCACCAGGATGTTTAATGCCTGCAGTCCAAAATTGGTTGGTAGAAGTACCTACTGTCAGTCCCATCTGTAGATTCACTTATCACATGGTAAGCGGG
ATGTCACTCAGGCCACGGGTAAATTATTTACAAGACTTTTCTTATCAAAGATCATTAAAATTTAGACCTAAAGGGAAACCTTGCCCCAAGGAAATTC
CCAAAGAATCAAAAAATACAGAAGTTTTAGTTTGGGAAGAATGTGTGGCCAATAGTGCGGTGATATTACAAAACAATGAATTCGGAACTATTATAGA
TTGGGCACCTCGAGGTCAATTCTACCACAATTGCTCAGGACAAACTCAGTCGTGTCAAAGTGCACAAGTGAGTCCAGCTGTTGATAGCGACTTAACA
GAAAGTTTAGACAAACATAAGCATAAAAAATTGCAGTCTTTCTACCCTTGGGAATGGGGAGAAAAAGGAATCTCTACCCCAAGACCAAAAATAGTAA
GTCCTGTTTCTGGTCCTGAACATCCAGAATTATGGAGGCTTACTGTGGCCTCACACCACATTAGAATTTGGTCTGGAAATCAAACTTTAGAAACAAG
AGATCGTAAGCCATTTTATACTATTGACCTGAATTCCAGTCTAACAGTTCCTTTACAAAGTTGCGTAAAGCCCCCTTATATGCTAGTTGTAGGAAAT
ATAGTTATTAAACCAGACTCCCAGACTATAACCTGTGAAAATTGTAGATTGCTTACTTGCATTGATTCAACTTTTAATTGGCAACACCGTATTCTGC
TGGTGAGAGCAAGAGAGGGCGTGTGGATCCCTGTGTCCATGGACCGACCGTGGGAGGCCTCGCCATCCGTCCATATTTTGACTGAAGTATTAAAAGG
TGTTTTAAATAGATCCAAAAGATTCATTTTTACTTTAATTGCAGTGATTATGGGATTAATTGCAGTCACAGCTACGGCTGCTGTAGCAGGAGTTGCA
TTGCACTCTTCTGTTCAGTCAGTAAACTTTGTTAATGATTGGCAAAAAAATTCTACAAGATTGTGGAATTCACAATCTAGTATTGATCAAAAATTGG
CAAATCAAATTAATGATCTTAGACAAACTGTCATTTGGATGGGAGACAGACTCATGAGCTTAGAACATCGTTTCCAGTTACAATGTGACTGGAATAC
GTCAGATTTTTGTATTACACCCCAAATTTATAATGAGTCTGAGCATCACTGGGACATGGTTAGACGCCATCTACAGGGAAGAGAAGATAATCTCACT
TTAGACATTTCCAAATTAAAAGAACAAATTTTCGAAGCATCAAAAGCCCATTTAAATTTGGTGCCAGGAACTGAGGCAATTGCAGGAGTTGCTGATG
GCCTCGCAAATCTTAACCCTGTCACTTGGGTTAAGACCATTGGAAGTACTACGATTATAAATCTCATATTAATCCTTGTGTGCCTGTTTTGTCTGTT
GTTAGTCTGCAGGTGTACCCAACAGCTCCGAAGAGACAGCGACCATCGAGAACGGGCCATGATGACGATGGCGGTTTTGTCGAAAAGAAAAGGGGGA
AATGTGGGGAAAAGCAAGAGAGATCAGATTGTTACTGTGTCTGTGTAG

SEQ ID 24

GTCACATGGATGGATAATCCTATAGAAGTATATGTTAATGATAGTGTATGGGTACCTGGCCCCACAGATGATCGCTGCCCTGCCAAACCTGAGGAAG
AAGGGATGATGATAAATATTTCCATTGTGTATCGTTATCCTCCTATTTGCCTAGGGAGAGCACCAGGATGTTTAATGCCTGCAGTCCAAAATTGGTT
GGTAGAAGTACCTACTGTCAGTCCTAACAGTAGATTCACTTATCACATGGTAAGCGGGATGTCACTCAGGCCACGGGTAAATTATTTACAAGACTTT
TCTTATCAAAGATCATTAAAATTTAGACCTAAAGGGAAACCTTGCCCCAAGGAAATTCCCAAAGAATCAAAAAATACAGAAGTTTTAGTTTGGGAAG
AATGTGTGGCCAATAGTGCGGTGATATTACAAAACAATGAATTCGGAACTATTATAGATTGGGCACCTCGAGGTCAATTCTACCACAATTGCTCAGG
ACAAACTCAGTCGTGTCCAAGTGCACAAGTGAGTCCAGCTGTTGATAGCGACTTAACAGAAAGTCTAGACAAACATAAGCATAAAAAATTACAGTCT
TTCTACCCTTGGGAATGGGGAGAAAAAGGAATCTCTACCCCAAGACCAGAAATAATAAGTCCTGTTTCTGGTCCTGAACATCCAGAATTATGGAGGC
TTTGGCCTGACACCACATTAGAATTTGGTCTGGAAATCAAACTTTAGAAACAAGAGATCGTAAGCCATTTTATACTATCGACCTAAATTCCAGTCTA
ACGGTTCCTTTACAAAGTTGCGTAAAGCCCTCTTATATGCTAGTTGTAGGAAATATAGTTATTAAACCAGACTCCCAAACTATAACCTGTGAAAATT
GTAGATTGTTTACTTGCATTGATTCAACTTTTAATTGGCGGCACCGTATTCTGCTGGTGAGAGCAAGAGAGGGCGTGTGGATCTCTGTGTCCGTGGA
CTGACCGTGGGAGGCCTCGCCATCCATCCATATTTTGACTGAAGTATTAAAAGACATTTTAAATAGATCCAAAAGATTCATTTTTACCTTAATTGCA
GTGATTATGGGATTAATTGCAGTCACAGCTACGGCTGCTGTGGCAGGAGTTGCATTGCACTCTTCTGTTCAGTCGGTAAACTTTGTTAATGATTGGC
AAAAGAATTCTACAAGATTGTGGAATTCACAATCTAGTATTGATCAAAAATTGGCAAATCAAATTAATGATCTTAGACAAACTGTCATTTGGATGGG
AGACAGACTCATGAGCTTAGAACATTGTTTCCAGTTACAGTGTGACTGGAATACGTCAGATTTTTGTATTACACCCCAAATTTATAATGAGTCTGAG
CATCACTGGGACATGGTTAGACGCCATCTACAGGGAAGAGAAGATAATCTCACTTTAGACATTTCCAAATTAAAATAACAAATTTTCGAAGCATCAA
AAGCCCATTTAAATTTGATGCCAGGAACTGAGGCAATTGCAGGAGTTGCTGATGGCCTCGCAAATCTTAACCCTGTCACTTGGGTTAAGACCATCGG
AAGTACTATGATTATAAATCTCATATTAATCCTTGTGTGCCTGTTTTGTCTGTTGTTAGTCTGCAGGTGTACCCAACAGCTCCGAAGAGACAGCGAC
CATCGAGAACGGGCCA

SEQ ID 25

ATGGGGCCTCTCCAACCCGGGTTGCCCTCTCCGGCCATGATCCCAAAAGATTGGCCTTTAATTATAATTGATCTAAAGGATTGCTTTTTTACCATCC
CTCTGGCAGAGCAGGATTGTGAAAAATTTGCCTTTACTATACCAGCCATAAATAATAAAGAACCAGCCACCAGGTTTCAGTGGAAAGTGTTACCTCA
GGGAATGCTTAATAGTCCAACTATTTGTCAGACTTTTGTAGGTCGAGCTCTTCAACCAGTGAGAGAAAAGTTTTCAGACTGTTATATTATTCATTAT
ATTGATGATATTTTATGTGCTGCAGAAACGAAAGATAAATTAATTGACTGTTATACATTTCTGCAAGCAGAGGTTGCCAATGCTGGACTGGCAATAG
CATCCGATAAGATCCAAACCTCTACTCCTTTTCATTATTTAGGGATGCAGATAGAAAATAGAAAATTAAGCCACAAAAAATAGAAATAAGAAAAGA
CACATTAAAAACACTAAATGATTTTCAAAAATTACTAGGAGATATTAATTGGATTCGGCCAACTCTAGGCATTCCTACTTATGCCATGTCAAATTTG
TTCTCTATCTTAAGAGGAGACTCAGACTTAAATAGTCAAAGAATATTAACCCCAGAGGCAACAAAAGAAATTAAATTAGTGGAAGAAAAAATTCAGT
CAGCGCAAATAAATAGAATAGATCCCTTAGCCCCACTCCAACTTTTGATTTTTGCCACTGCACATTCTCCAACAGGCATCATTATTCAAAATACTGA
TCTTGTGGAGTGGTCATTCCTTCCTCACAGTACAGTTAAGACTTTTACATTGTACTTGGATCAAATAGCTACATTAATCGGTCAGACAAGATTACGA
ATAACAAAATTATGTGGAAATGACCCAGACAAAATAGTTGTCCCTTTAACCAAGGAACAAGTTAGACAAGCCTTTATCAATTCTGGTGCATGGCAGA
TTGGTCTTGCTAATTTTGTGGGACTTATTGATAATCATTACCCAAAAACAAAGATCTTCCAGTTCTTAAAATTGACTACTTGGATTCTACCTAAAAT
TACCAGACGTGAACCTTTAGAAAATGCTCTAACAGTATTTACTGATGGTTCCAGCAATGGAAAAGCAGCTTACACAGGGCCGAAAGAACGAGTAATC
AAAACTCCATATCAATCGGCTCAAAGAGACGAGTTGGTTGCAGTCATTACAGTGTTACAAGATTTTGACCAACCTATCAATATTATATCAGATTCTG
CATATGTAGTACAGGCTACAAGGGATGTTGAGACAGCTCTAATTAAATATAGCATGGATGATCAGTTAAACCAGCTATTCAATTTATTACAACAAAC

TGTAAGAAAAAGAAATTTCCCATTTTATATTACTTATATTCGAGCACACACTAATTTACCAGGGCCTTTGACTAAAGCAAATGAACAAGCTGACTTA
CTGGTATCATCTGCACTCATAAAAGCACAAGAACTTCATGCTTTGACTCATGTAAATGCAGCAGGATTAAAAAAACAAATTTGATGTCACATGGAAAC
AGGCAAAAGATATTGTACAACATTGCACCCAGTGTCAAGTCTTACACCTGCCCACTCAAGAGGCAGGAGTTAATCCCAGAGGTCTGTGTCCTAATGC
ATTATGGCAAATGGATGTCACGCATGTACCTTCATTTGGAAGATTATCATATGTTCATGTAACAGTTGATACTTATTCACATTTCATATGGGCAACT
TGCCAAACAGGAGAAAGTACTTCCCATGTTAAAAAACATTTATTGTCTTGTTTTGCTGTAATGGGAGTTCCAGAAAAAATCAAAACTGACAATGGAC
CAGGATATTGTGAGTAAAGCTTTCCAAAAATTCTTAAGTCAGTGGAAAATTTCACATACAACAGGAATTCCTTATAATTCCCAAGGACAGGCCATAGT
TGAAAGAACTAATAGAACACTCAAAACTCAATTAGTTAAACAAAAAGAAGGGGGAGACAGTAAGGAGTGTACCACTCCTCAGATGCAACTTAATCTA
GCACTCTATACTTTAAATTTTTTAAACATTTATAGAAATCAGACTACTACTTCTGCAGAACAACATCTTACTGGTAAAAAGAACAGCCCACATGAAG
GAAAACTAATTTGGTGGAAAGATAATAAAAATAAGACATGGGAAATAGGGAAGGTGATAACGTGGGGGAGAGGTTTTGCTTGTGTTTCACCAGGAGA
AAATCAGCTTCCTGTTTGGTTACCCACTAGACATTTGAAGTTCTACAATGAACCCATCGGAGATGCAAAGAAAAGGGCCTCCACGGAGATGGTAACA
CCAGTCACATGGATGGATAAATATTTCCATTGGGTATCGTTATCCTCCTATTTGCCTAGGGAGAGCACCAGGATGTTTAATGCCTGCAGTCCAAAATTG
GTTGGTAGAAGTACCTACTGTCAGTCCCATCAGTAGATTCACTTATCACATGGTAAGCGGGATGTCACTCAGGCCACGGGTAAATTATTTACAAGAC
TTTTCTTATCAAAGATCATTAAAAATTTAGACCTAAAGGGAAACCTTGCCCCAAGGAAATTCCCAAAGAATCAAAAAATACAGAAGTTTTAGTTTGGG
AAGAATGTGTGGCCAATAGTGCGGTGATATTATAAAAACAATGAATTTGGAACTATTATAGATTGGGCACCTCGAGGTCAATTCTACCACAATTGCTC
AGGACAAACTCAGTCGTGTCCAAGTGCACAAGTGAGTCCAGCTGTTGATAGCGACTTAACAGAAAGTTTAGACAAACATAAGCATAAAAAATTGCAG
TCTTTCTACCCTTGGGAATGGGGAGAAAAAGGAATCTCTACCCCAAGACCCAAAATAGTAAGTCCTGTTTCTGGTCCTGAACATCCAGAATTATGGA
GGCTTACTGTGGCCTCACACCACATTAGAATTTGGTCTGGAAATCAAACTTTAGAAACAAGAGATTGTAAGCCATTTTATACTGTCGACCTAAATTC
CAGTCTAACAGTTCCTTTACAAAGTTGCGTAAAGCCCCCTTATATGCTAGTTGTAGGAAATATAGTTATTAAACCAGACTCCCAGACTATAACCTGT
GAAAATTGTAGATTGCTTACTTGCATTGATTCAACTTTTAATTGGCAACACCGTATTCTGCTGGTGAGAGCAAGAGAGGGCGTGTGGATCCCTGTGT
CCATGGACCGACCGTGGGAGGCCTCACCATCCGTCCATATTTTGACTGAAGTATTAAAAGGTGTTTTAAATAGATCCAAAAGATTCATTTTTTACTTT
AATTGCAGTGATTATGGGATTAATTGCAGTCACAGCTACGGCTGCTGTAGCAGGAGTTGCATTGCACTCTTCTGTTCAGTCAGTAAACTTTGTTAAT
GATTGGCAAAAGAATTCTACAAGATTGTGGAATTCACAATCTAGTATTGATCAAAAATTGGCAAATCAAATTAATGATCTTAGACAAACTGTCATTT
GGATGGGAGACAGACTCATGAGCTTAGAACATCGTTTCCAGTTACAATGTGACTGGAATACGTCAGATTTTTGTATTACACCCCAAATTTATAATGA
GTCTGAGCATCACTGGGACATGGTTAGACGCCATCTACAGGGAAGAGAAGATAATCTCACTTTAGACATTTCCAAATTAAAAGAACAAATTTTCGAA
GCATCAAAAGCCCATTTAAATTTGGTGCCAGGAACTGAGGCAATTGCAGGAGTTGCTGATGGCCTCGCAAATCTTAACCCTGTCACTTGGGTTAAGA
CCATTGGAAGTACATCGATTATAAATCTCATATTAATCCTTGTGTGCCTGTTTTGTCTGTTGTTAGTCTGCAGGTGTACCCAACAGCTCCGAAGAGA
CAGCGACCATCGAGAACGGGCCATGATGACGATGGCGGTTTTGTCGAAAAGAAAAGGGGGAAATGTGGGGAAAAGCAAGAGAGATCAAATTGTTACT
GTGTCTGTGTAG

SEQ ID 26

MQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVVSLPMPAGAAAANYT
YWAYVPFPPLIRAVTWMDNPTEVYVNDSVWVPGPIDDRCPAKPEEEGMMINISIGYHYPPICLGRAPGCLMPAVQNWLVEVPTVSPICRFTYHMVSG
MSLRPRVNYLQDFSYQRSLKFRPKGKPCPKEIPKESKNTEVLVWEECVANSAVILQNNEFGTIIDWAPRGQFYHNCSGQTQSCQSAQVSPAVDSDLT
ESLDKHKHKKLQSFYPWEWGEKGISTPRPKIVSPVSGPEHPELWRLTVASHHIRIWSGNQTLETRDRKPFYTIDLNSSLTVPLQSCVKPPYMLVVGN
IVIKPDSQTITCENCRLLTCIDSTFNWQHRILLVRAREGVWIPVSMDRPWEASPSVHILTEVLKGVLNRSKRFIFTLIAVIMGLIAVTATAAVAGVA
LHSSVQSVNFVNDWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRLMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGREDNLT
LDISKLKEQIFEASKAHLNLVPGTEAIAGVADGLANLNPVTWVKTIGSTTIINLILILVCLFCLLLVCRCTQQLRRDSDHRERAMMTMAVLSKRKGG
NVGKSKRDQIVTVSV

SEQ ID 27

MGPLQPGLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMLNSPTICQTFVGRALQPVREKFSDCYIIHY
IDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQTSTPFHYLGMQIENRKIKPQKIEIRKDTLKTLNDFQKLLGDINWIRPTLGIPTYAMSNL
FSILRGDSDLNSQRILTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIIQNTDLVEWSFLPHSTVKTFTLYLDQIATLIGQTRLR
ITKLCGNDPDKIVVPLTKEQVRQAFINSGAWQIGLANFVGLIDNHYPKTKIFQFLKLTTWILPKITRREPLENALTVFTDGSSNGKAAYTGPKERVI
KTPYQSAQRDELVAVITVLQDFDQPINIISDSAYVVQATRDVETALIKYSMDDQLNQLFNLLQQTVRKRNFPFYITYIRAHTNLPGPLTKANEQADL
LVSSALIKAQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVLHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYVHVTVDTYSHFIWAT
CQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQGQAIVERTNRTLKTQLVKQKEGGDSKECTTPQMQLNL
ALYTLNFLNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDKNKNKTWEIGKVITWGRGFACVSPGENQLPVWLPTRHLKFYNEPIGDAKKRASTEMVT
PVTWMDNPIEVYVNDSIWVPGPIDDRCPAKPEEEGMMINISIGYRYPPICLGRAPGCLMPAVQNWLVEVPTVSPISRFTYHMVSGMSLRPRVNYLQD
FSYQRSLKFRPKGKPCPKEIPKESKNTEVLVWEECVANSAVILXNNEFGTIIDWAPRGQFYHNCSGQTQSCPSAQVSPAVDSDLTESLDKHKHKKLQ
SFYPWEWGEKGISTPRPKIVSPVSGPEHPELWRLTVASHHIRIWSGNQTLETRDCKPFYTVDLNSSLTVPLQSCVKPPYMLVVGNIVIKPDSQTITC
ENCRLLTCIDSTFNWQHRILLVRAREGVWIPVSMDRPWEASPSVHILTEVLKGVLNRSKRFIFTLIAVIMGLIAVTATAAVAGVALHSSVQSVNFVN
DWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRLMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGREDNLTLDISKLKEQIFE
ASKAHLNLVPGTEAIAGVADGLANLNPVTWVKTIGSTSIINLILILVCLFCLLLVCRCTQQLRRDSDHRERAMMTMAVLSKRKGGNVGKSKRDQIVT
VSV

SEQ ID 28

MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVVSLPMPAGAA
AANYTYWAYVPFPPLIRAVTWMDNPTEVYVNDSVWVPGPIDDRCPAKPEEEGMMINISIGYHYPPICLGRAPGCLMPAVQNWLVEVPTVSPICRFTY

HMVSGMSLRPRVNYLQDFSYQRSLKFRPKGKPCPKEIPKESKNTEVLVWEECVANSAVILQNNEFGTIIDWAPRGQFYHNCSGQTQSCPSAQVSPAV
DSDLTESLDKHKHKKLQSFYPWEWGEKGISTPRPKIVSPVSGPEHPELWRLTVASHHIRIWSGNQTLETRDRKPFYTIDLNSSLTVPLQSCVKPPYM
LVVGNIVIKPDSQTITCENCRLLTCIDSTFNWQHRILLVRAREGVWIPVSMDRPWEASPSVHILTEVLKGVLNRSKRFIFTLIAVIMGLIAVTATAA
VAGVALHSSVQSVNFVNDWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRLMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGR
EDNLTLDISKLKEQIFEASKAHLNLVPGTEAIAGVADGLANLNPVTWVKTIGSTTIINLILILVCLFCLLLVCRCTQQLRRDSDHRERAMMTMAVLS
KRKGGNVGKSKRDQIVTVSV

SEQ ID 29

AGTTCTACAATGAACCCATCAGAGATGCAAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAA
TGGTGACGTCAGAAGAACAGATGAAGTTGCCATCCACCAAGAAGGCAGAGCCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAA
ATATCTAGAGAACACAAAGGTGACACAAACCCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCA
GGA

SEQ ID 30

TCTGCAGGTGTACCCAACAGCTCCGAAGAGACAGCGACCATCGAGAACGGGCCATGA

SEQ ID 31

MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAGPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVSAGVPNSSEE
TATIENGP

SEQ ID 32

MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKSAGVPNSSEETATIENGP

SEQ ID 33

MNPSEMQRKGPPQRCLQVYPTAPKRQRPSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRRLHFVLY

SEQ ID 34

MNSLEMQRKVWRWRHPNRLASLQVYPAAPKRQQPARMGHSDDGGFVKKKRGGYVRKREIRLSLCLCRKGRHKKLHFVLY

SEQ ID 35

MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVILQVYPTAPKRQRPSRTGHDDDGGFVEK
KRGKCGEKQERSDCYCVCVERSRHRRLHFVLY

SEQ ID 36

MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVYPTAPKRQRPSRTGHDDDGGFVEKKRGK
CGEKQERSDCYCVCVERSRHRRLHFVLY

SEQ ID 37

MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVVYPTAPKRQR
PSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRRLHFVLY

SEQ ID 38

MNPSEMQRKGPPQRCLQVYPTAPKRQRPSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRRLHFVLY

SEQ ID 39

MNPSEMQRKGPPQRCLQVYPTAPKRQRPSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRRLHFVLY

SEQ ID 40

MEYKNRHLKFYNEPIGDAKKRASTEMSAGVPNSSEETATIENGP

SEQ ID 41

MNPSEMQRKGPPQRCLQVYPTAPKRQRPSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRRLHFVLY

SEQ ID 42

MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKSAGVPNSSEETATIENGP

SEQ ID 43

MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVSAGVPNSSEE
TATIENGP

SEQ ID 44

MVTPVTWMDNPIEVYVNDSVWVPGPTDDRCPAKPEEEGMMINISIVYRYPPICLGRAPGCLMPAVQNCLQVYPTAPKRQRPSRTGHDDDGGFVEKKR
GKCGEKQERSDCYCVCVERSRHRRLHFVLY

SEQ ID 45

MVTPVTWMDNPIEVYVNDSEWVPGPTDDRCPAKPEEEGMMINISIGLQVYPTAPKRQRPSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRH
RRLHFVMC

SEQ ID 46

MNSLEMQRKVWRWRHPNRLASLQVYPAAPKRQQPARMGHSDDGGFVKKKRGGYVRKREIRLSLCLCRKGRHKKLHFDLY

SEQ ID 47

MNSLEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLSSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVVSLPMPAGAA
AANYTYWAYVPFPPLIRAVTWMDNPTEVYVNDSVWVPGPIDDRCPAKPEEEGMMINISIGYHYPPICLGRAPGCLMPAVQNWLVEVPTVSPICRFTY
HMSAGVPNSSEETATIENGP

SEQ ID 48

MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTLQVYPTAPKRQRPSRTGHDDDGGFVEK
KRGKCGEKQERSDCYCVCVERSRHRRLHFVMY

SEQ ID 49

MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVYPTAPKRQRPSRTGHDDDGGFVEKKRGK
CGEKQERSDCYCVCVERSRHRRLHFVMY

SEQ ID 50

MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYXLENTKVTQTPESMLLAALMIVSMVVYPTAPKRQ
RPSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRRLHFVMY

SEQ ID 51

GCCGCGGAATTTCGACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGA
CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATG
GCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCA
ATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGG
CCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT
TTTGGCAGTACACCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTTTTGGCACCA
AAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCT
CGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGCGGCCGGGAAC
GGTGCATTGGAACGCGGATTCCCCGTGCCAAGAGTGACGTAAGTACCGCCTATAGACTCTATAGGCACACCCCTTTGGCTCTTATGCATGCTATACT
GTTTTTGGCTTGGGGCCTATACACCCCCGCTTCCTTATGCTATAGGTGATGGTATAGCTTAGCCTATAGGTGTGGGTTATTGACCATTATTGACCAC
TCCCCTATTGGTGACGATACTTTCCATTACTAATCCATAACATGGCTCTTTGCCACAACTATCTCTATTGGCTATATGCCAATACTCTGTCCTTCAG
AGACTGACACGGACTCTGTATTTTTACAGGATGGGGTCCCATTTATTATTTACAAATTCACATATACAACAACGCCGTCCCCCGTGCCCGCAGTTTT
TATTAAACATAGCGTGGGATCTCCACGCGAATCTCGGGTACGTGTTCCGGACATGGGCTCTTCTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCT
GGTCCCATGCCTCCAGCGGCTCATGGTCGCTCGGCAGCTCCTTGCTCCTAACAGTGGAGGCCAGACTTAGGCACAGCACAATGCCCACCACCACCAG
TGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG
GCAGAAGAAGATGCAGGCAGCTGAGTTGTTGTATTCTGATAAGAGTCAGAGGTAACTCCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCT
GAGCAGTACTCGTTGCTGCCGCGCGCGCCACCAGACATAATAGCTGACAGACTAACAGACTGTTCCTTTCCATGGGTCTTTTCTGCAGTCACCGTCg
tcgacgccaccatgaaccccagcgagatgcagcgcaaggccccccccgccgccgccgccaccgcaaccgcgcccccctgacccacaagatgaacaa
gatggtgaccagcgaggagcagatgaagctgcccagcaccaagaaggccgagcccccaccctgggcccagctgaagaagctgacccagctggccacc
aagtacctggagaacaccaaggtgacccagacccccgagagcatgctgctggccgccctgatgatcgtgagcatggtgagcgccggcgtgcccaaca
gcagcgaggagaccgccaccatcgagaacggccccgcttaaagaattcAGACTCGAGCAAGTCTAGAAAGCCATGGATATCGGATCCACTACGCGTT
AGAGCTCGCTGATCAGCCTCGACTGTGCCTTCTAGTTGCCAGCCATCTGTTGTTTGCCCCTCCCCCGTGCCTTCCTTGACCCTGGAAGGTGCCACTC
CCACTGTCCTTTCCTAATAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGGTGGGGTGGGGCAGGACAGCAAGGG
GGAGGATTGGGAAGACAATAGCAGGGGGGGTGGGCGAAGAACTCCAGCATGAGATCCCCGCGCTGGAGGATCATCCAGCCGGCGTCCCGGAAAACGAT
TCCGAAGCCCAACCTTTCATAGAAGGCGGCGGTGGAATCGAAATCTCGTGATGGCAGGTTGGGCGTCGCTTGGTCGGTCATTTCGAACCCCAGAGTC
CCGCTCAGAAGAACTCGTCAAGAAGGCGATAGAAGGCGATGCGCTGCGAATCGGGAGCGGCGATACCGTAAAGCACGAGGAAGCGGTCAGCCCATTC
GCCGCCAAGCTCTTCAGCAATATCACGGGTAGCCAACGCTATGTCCTGATAGCGGTCCGCCACACCCAGCCGGCCACAGTCGATGAATCCAGAAAAG
CGGCCATTTTCCACCATGATATTCGGCAAGCAGGCATCGCCATGGGTCACGACGAGATCCTCGCCGTCGGGCATGCGCGCCTTGAGCCTGGCGAACA
GTTCGGCTGGCGCGAGCCCCTGATGCTCTTCGTCCAGATCATCCTGATCGACAAGACCGGCTTCCATCCGAGTACGTGCTCGCTCGATGCGATGTTT
CGCTTGGTGGTCGAATGGGCAGGTAGCCGGATCAAGCGTATGCAGCCGCCGCATTGCATCAGCCATGATGGATACTTTCTCGGCAGGAGCAAGGTGA
GATGACAGGAGATCCTGCCCCGGCACTTCGCCCAATAGCAGCCAGTCCCTTCCCGCTTCAGTGACAACGTCGAGCACAGCTGCGCAAGGAACGCCCG
TCGTGGCCAGCCACGATAGCCGCGCTGCCTCGTCCTGCAGTTCATTCAGGGCACCGGACAGGTCGGTCTTGACAAAAAGAACCGGGCGCCCCTGCGC
TGACAGCCGGAACACGGCGGCATCAGAGCAGCCGATTGTCTGTTGTGCCCAGTCATAGCCGAATAGCCTCTCCACCCAAGCGGCCGGAGAACCTGCG
TGCAATCCATCTTGTTCAATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGATCTTGATCCCCTGCGCCATCAGATCCTTGGCGGCAAGAAAG
CCATCCAGTTTACTTTGCAGGGCTTCCCAACCTTACCAGAGGGCGCCCCAGCTGGCAATTCCGGTTCGCTTGCTGTCCATAAAACCGCCCAGTCTAG
CTATCGCCATGTAAGCCCACTGCAAGCTACCTGCTTTCTCTTTGCGCTTGCGTTTTCCCTTGTCCAGATAGCCCAGTAGCTGACATTCATCCGGGGT
CAGCACCGTTTCTGCGGACTGGCTTTCTACGTGTTCCGCTTCCTTTAGCAGCCCTTGCGCCCTGAGTGCTTGCGGCAGCGTGAAGCTAATTCATGGT
TAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGCCCGAGATAGGGTTGAGTGT
TGTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTATCAGGGCGATGGCCGGATCAGCTTA
TGCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAATACCGCATCAGGCGCTCTTCCGCTTCCTCGCTCACTGACTCGCTGCGCTCGGTCGTTCG
GCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAG
CAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGA
GGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATA

CCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGC
TGTGTGCACGAACCCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGCACGACTTATCGCCACTGG
CAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGGAC
AGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGT
TTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACTGAACGGTGATCCCCACCGGAATTGC
G

SEQ ID 52

GCCGCGGAATTTCGACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGA
CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATG
GCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCA
ATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGG
CCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT
TTTGGCAGTACACCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTTTTGGCACCA
AAAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCT
CGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGCGGCCGGGAAC
GGTGCATTGGAACGCGGATTCCCCGTGCCAAGAGTGACGTAAGTACCGCCTATAGACTCTATAGGCACACCCCTTTGGCTCTTATGCATGCTATACT
GTTTTTGGCTTGGGGCCTATACACCCCCGCTTCCTTATGCTATAGGTGATGGTATAGCTTAGCCTATAGGTGTGGGTTATTGACCATTATTGACCAC
TCCCCTATTGGTGACGATACTTTCCATTACTAATCCATAACATGGCTCTTTGCCACAACTATCTCTATTGGCTATATGCCAATACTCTGTCCTTCAG
AGACTGACACGGACTCTGTATTTTTACAGGATGGGGTCCCATTTATTATTTACAAATTCACATATACAACAACGCCGTCCCCCGTGCCCGCAGTTTT
TATTAAACATAGCGTGGGATCTCCACGCGAATCTCGGGTACGTGTTCCGGACATGGGCTCTTCTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCT
GGTCCCATGCCTCCAGCGGCTCATGGTCGCTCGGCAGCTCCTTGCTCCTAACAGTGGAGGCCAGACTTAGGCACAGCACAATGCCCACCACCACCAG
TGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG
GCAGAAGAAGATGCAGGCAGCTGAGTTGTTGTATTCTGATAAGAGTCAGAGGTAACTCCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCT
GAGCAGTACTCGTTGCTGCCGCGCGCGCCACCAGACATAATAGCTGACAGACTAACAGACTGTTCCTTTCCATGGGTCTTTTCTGCAGTCACCGTCg
tcgacgccaccatgaaccccagcgagatgcagcgcaaggcccccccccgccgccgccgccaccgcaaccgcgcccccctgacccacaagatgaacaa
gatggtgaccagcgaggagcagatgaagctgcccagcaccaagaaggccgagccccccacctgggcccagctgaagaagctgacccagctggccacc
aagtacctggagaacaccaaggtgacccagacccccgagagcatgctgctggccgcccctgatgatcgtgagcatggtggtgtaccccaccgccccca
agcgccagcgcccccagccgcaccggccacgacgacgacggcggcttcgtggagaagaagcgcggcaagtgcggcgagaagcaggagcgcagcgactg
ctactgcgtgtgcgtggagcgcagccgccaccgccgcctgcacttcgtgctgtacgcttaaagaattcAGACTCGAGCAAGTCTAGAAAGCCATGGA
TATCGGATCCACTACGCGTTAGAGCTCGCTGATCAGCCTCGACTGTGCCTTCTAGTTGCCAGCCATCTGTTGTTTGCCCCTCCCCCGTGCCTTCCTT
GACCCTGGAAGGTGCCACTCCCACTGTCCTTTCCTAATAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGGTGGG
GTGGGGCAGGACAGCAAGGGGGAGGATTGGGAAGACAATAGCAGGGGGGTGGGCGAAGAACTCCAGCATGAGATCCCCGCGCTGGAGGATCATCCAG
CCGGCGTCCCGGAAAACGATTCCGAAGCCCAACCTTTTCATAGAAGGCGGCGGTGGAATCGAAATCTCGTGATGGCAGGTTGGGCGTCGCTTGGTCGG
TCATTTCGAACCCCAGAGTCCCGCTCAGAAGAACTCGTCAAGAAGGCGATAGAAGGCGATGCGCTGCGAATCGGGAGCGGCGATACCGTAAAGCACG
AGGAAGCGGTCAGCCCATTCGCCGCCAAGCTCTTCAGCAATATCACGGGTAGCCAACGCTATGTCCTGATAGCGGTCCGCCACACCCAGCCGGCCAC
AGTCGATGAATCCAGAAAAGCGGCCATTTTCCACCATGATATTCGGCAAGCAGGCATCGCCATGGGTCACGACGAGATCCTCGCCGTCGGGCATGCG
CGCCTTGAGCCTGGCGAACAGTTCGGCTGGCGCGAGCCCCTGATGCTCTTCGTCCAGATCATCCTGATCGACAAGACCGGCTTCCATCCGAGTACGT
GCTCGCTCGATGCGATGTTTCGCTTGGTGGTCGAATGGGCAGGTAGCCGGATCAAGCGTATGCAGCCGCCGCATTGCATCAGCCATGATGGATACTT
TCTCGGCAGGAGCAAGGTGAGATGACAGGAGATCCTGCCCCGGCACTTCGCCCAATAGCAGCCAGTCCCTTCCCGCTTCAGTGACAACGTCGAGCAC
AGCTGCGCAAGGAACGCCCGTCGTGGCCAGCCACGATAGCCGCGCTGCCTCGTCCTGCAGTTCATTCAGGGCACCGGACAGGTCGGTCTTGACAAAA
AGAACCGGGCGCCCCTGCGCTGACAGCCGGAACACGGCGGCATCAGAGCAGCCGATTGTCTGTTGTGCCCAGTCATAGCCGAATAGCCTCTCCACCC
AAGCGGCCGGAGAACCTGCGTGCAATCCATCTTGTTCAATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGATCTTGATCCCCTGCGCCATCA
GATCCTTGGCGGCAAGAAAGCCATCCAGTTTACTTTGCAGGGCTTCCCAACCTTACCAGAGGGCGCCCCAGCTGGCAATTCCGGTTCGCTTGCTGTC
CATAAAACCGCCCAGTCTAGCTATCGCCATGTAAGCCCACTGCAAGCTACCTGCTTTCTCTTTGCGCTTGCGTTTTCCCTTGTCCAGATAGCCCAGT
AGCTGACATTCATCCGGGGTCAGCACCGTTTCTGCGGACTGGCTTTCTACGTGTTCCGCTTCCTTTAGCAGCCCTTGCGCCCTGAGTGCTTGCGGCA
GCGTGAAGCTAATTCATGGTTAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAG
CCCGAGATAGGGTTGAGTGTTGTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTATCAGG
GCGATGGCCCGATCAGCTTATGCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAATACCGCATCAGGCGCTCTTCCGCTTCCTCGCTCACTGAC
TCGCTGCGCTCGGTCGTTCGGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGA
ACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCCTGACGAGCATCACAA
AAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCG
ACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGG
TCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAG
ACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAAC
TACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAA
CCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACTGAACG
GTGATCCCCACCGGAATTGCG

SEQ ID 53

GCCGCGGAATTTCGACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGA
CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATG
GCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCA
ATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGG
CCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT
TTTGGCAGTACACCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTTTTGGCACCA
AAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCT
CGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGCGGCCGGGAAC
GGTGCATTGGAACGCGGATTCCCCGTGCCAAGAGTGACGTAAGTACCGCCTATAGACTCTATAGGCACACCCCTTTGGCTCTTATGCATGCTATACT
GTTTTTGGCTTGGGGCCTATACACCCCCGCTTCCTTATGCTATAGGTGATGGTATAGCTTAGCCTATAGGTGTGGGTTATTGACCATTATTGACCAC
TCCCCTATTGGTGACGATACTTTCCATTACTAATCCATAACATGGCTCTTTGCCACAACTATCTCTATTGGCTATATGCCAATACTCTGTCCTTCAG
AGACTGACACGGACTCTGTATTTTTACAGGATGGGGTCCCATTTATTTATTTACAAATTCACATATACAACAACGCCGTCCCCCGTGCCCGCAGTTTT
TATTAAACATAGCGTGGGATCTCCACGCGAATCTCGGGTACGTGTTCCGGACATGGGCTCTTCTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCT
GGTCCCATGCCTCCAGCGGCTCATGGTCGCTCGGCAGCTCCTTGCTCCTAACAGTGGAGGCCAGACTTAGGCACAGCACAATGCCCACCACCACCAG
TGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG
GCAGAAGAAGATGCAGGCAGCTGAGTTGTTGTATTCTGATAAGAGTCAGAGGTAACTCCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCT
GAGCAGTACTCGTTGCTGCCGCGCGCGCCACCAGCACATAATAGCTGACAGACTAACAGACTGTTCCTTTCCATGGGTCTTTTCTGCAGTCACCGTCg
tcgacgccaccatggggcaaactgaaagtaaatatgcctcttatctcagctttattaaaattcttttaagaagaggggggagttagagcttctacaga
aaatctaattacgctatttcaaacaatagaacaattctgcccatggtttccagaacagggaactttagatctaaaagattgggaaaaaattggcaaa
gaattaaaacaagcaaatagggaaggtaaaatcatcccacttacagtatggaatgattgggccattattaaagcaactttagaaccatttcaaacag
gagaagatattgtttcagtttctgatgcccctaaaagctgtgtaacagattgtgaagaagaggcagggacagaatcccagcaaggaacggaaagttc
acattgtaaatatgtagcagagtctgtaatggctcagtcaacgcaaaatgttgactacagtcaattacaggagataatatatccctgaatcatcaaaa
ttggggggaaggaggtccagaatcattggggccatcagagcctaaaccacgatcgccatcaactcctcctcccgtggttcagatgcctgtaacattac
aacctcaaacgcaggttagacaagcacaaaccccaagagaaaatcaagtagaaaagggacagagtctctatcccggcaatgccaactcagatacagta
tccacaatatcagccggtagaaaataagacccaaccgctggtagttatcaataccggctgccaaccgagcttcagtatcggcctccttcagaggtt
caatacagacctcaagcggtgtgtcctgtgccaaatagcacggcaccataccagcaacccacagcgatggcgtctaattcaccagcaacacaggacg
cggcgctgtatcctcagccgcccactgtgagacttaatcctacagcatcacgtagtggacagggtggtgcactgcatgcagtcattgatgaagccag
aaaacagggcgatcttgaggcatggcggttcctggtaattttacaactggtacaggccggggaagagactcaagtaggagcgcctgcccgagctgag
actagatgtgaacctttcaccatgaaaatgttaaaagatataaaggaaggagttaaacaatatggatccaactcccccttatataagaacattattag
attccattgctcatggaaatagacttactccttatgactgggaaattttggccaaatcttccctttcatcctctcagtatctacagtttaaaacctg
gtggattgatggagtacaagaacaggtacgaaaaaatcaggctactaagcccactgttaatatagacgcagaccaattgttaggaacaggtccaaat
tggagcaccattaaccaacaatcagtgatgcagaatgaggctattgaacaagtaagggctatttgcctcagggcctggggaaaaaattcaggacccag
gaacagctttccctattaattcaattagacaaggctctaaagagccatatcctgactttgtggcaagattacaagatgctgctcaaaagtctattac
agatgacaatgcccgaaaagtta ttgtagaattaatggcctatgaaatgcaaatccagaatgtcagtcggccataaagccattaaaaggaaaagtt
ccagcaggagttgatgtaattacagaatatgtgaaggcttgtgatgggattggaggagctatgcataaggcaatgctaatggctcaagcaatgagggg
ggctcactctaggaggacaagttagaacatttgggaaaaaatgttataattgtggtcaaatcggtcatctgaaaaggagttgcccagtcttaaataa
acagaatataataaatcaagctattacagcaaaaaaataaaaagccatctggcctgtgtccaaatgtggaaaaggaaaacattgggccaatcaatgt
cattctaaatttgataaggatgggcaaccattgtcgggaaacaggaagagggggccagcctcaggccccccaacaaactggggcattcccagttcaac
tgtttgttcctcagggttttcaaggacaacaaccccctacagaaaataccaccacttcagggagtcagccaattacaacaatccaacagctgtcccgc
gccacagcaggcagcaccgcagtaagaattcagactcgagcaagtctagaAAGCCATGGATATCGGATCCACTACGCGTTAGAGCTCGCTGATCAGC
CTCGACTGTGCCTTCTAGTTGCCAGCCATCTGTTGTTTGCCCCTCCCCCGTGCCTTCCTTGACCCTGGAAGGTGCCACTCCCACTGTCCTTTCCTAA
TAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGGTGGGGTGGGGCAGGACAGCAAGGGGGAGGATTGGGAAGACA
ATAGCAGGGGGTGGGCGAAGAACTCCAGCATGAGATCCCCGCGCTGGAGGATCATCCAGCCGGCGTCCCGGAAAACGATTCCGAAGCCCAACCTTT
CATAGAAGGCGGCGGTGGAATCGAAATCTCGTGATGGCAGGTTGGGCGTCGCTTGGTCGGTCATTTCGAACCCCAGAGTCCCGCTCAGAAGAACTCG
TCAAGAAGGCGATAGAAGGCGATGCGCTGCGAATCGGGAGCGGCGATACCGTAAAGCACGAGGAAGCGGTCAGCCCATTCGCCGCCAAGCTCTTCAG
CAATATCACGGGTAGCCAACGCTATGTCCTGATAGCGGTCCGCCACACCCAGCCGGCCACAGTCGATGAATCCAGAAAAGCGGCCATTTTCCACCAT
GATATTCGGCAAGCAGGCATCGCCATGGGTCACGACGAGATCCTCGCCGTCGGGCATGCGCGCCTTGAGCCTGGCGAACAGTTCGGCTGGCGCGAGC
CCCTGATGCTCTTCGTCCAGATCATCCTGATCGACAAGACCGGCTTCCATCCGAGTACGTGCTCGCTCGATGCGATGTTTCGCTTGGTGGTCGAATG
GGCAGGTAGCCGGATCAAGCGTATGCAGCCGCCGCATTGCATCAGCCATGATGGATACTTTCTCGGCAGGAGCAAGGTGAGATGACAGGAGATCCTG
CCCCGGCACTTCGCCCAATAGCAGCCAGTCCCTTCCCGCTTCAGTGACAACGTCGAGCACAGCTGCGCAAGGAACGCCCGTCGTGGCCAGCCACGAT
AGCCGCGCTGCCTCGTCCTGCAGTTCATTCAGGGCACCGGACAGGTCGGTCTTGACCGGAGCAAAAAAGAACCGGGCGCCCCTGCGCTGACAGCCGGAACACGG
CGGCATCAGAGCAGCCGATTGTCTGTTGTGCCCAGTCATAGCCGAATAGCCTCTCCACCCAAGCGGCCGGAGAACCTGCGTGCAATCCATCTTGTTC
AATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGATCTTGATCCCCTGCGCCATCAGATCCTTGGCGGCAAGAAAGCCATCCAGTTTACTTTG
CAGGGCTTCCCAACCTTACCAGAGGGCGCCCCAGCTGGCAATTCCGGTTCGCTTGCTGTCCATAAAACCGCCCAGTCTAGCTATCGCCATGTAAGCC
CACTGCAAGCTACCTGCTTTCTCTTTGCGCTTGCGTTTTCCCTTGTCCAGATAGCCCAGTAGCTGACATTCATCCGGGGTCAGCACCGTTTCTGCGG
ACTGGCTTTCTACGTGTTCCGCTTCCTTTAGCAGCCCTTGCGCCCTGAGTGCTTGCGGCAGCGTGAAGCTAATTCATGGTTAAATTTTTGTTAAATC
AGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGCCCGAGATAGGGTTGAGTGTTGTTCCAGTTTGGAACA

AGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTATCAGGGCGATGGCCGGATCAGCTTATGCGGTGTGAAATACCG
CACAGATGCGTAAGGAGAAAATACCGCATCAGGCGCTCTTCCGCTTCCTCGCTCACTGACTCGCTGCGCTCGGTCGTTCGGCTGCGGCGAGCGGTAT
CAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCG
TAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACA
GGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCC
CTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCC
CGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAAC
AGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCG
CTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTTTGCAAGCA
GCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACTGAACGGTGATCCCCACCGGAATTGCG

SEQ ID 54

GCCGCGGAATTTCGACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGA
CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATG
GCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCA
ATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGG
CCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT
TTTGGCAGTACACCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTTTTGGCACCA
AAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCT
CGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGCGGCCGGGAAC
GGTGCATTGGAACGCGGATTCCCCGTGCCAAGAGTGACGTAAGTACCGCCTATAGACTCTATAGGCACACCCCTTTGGCTCTTATGCATGCTATACT
GTTTTTGGCTTGGGGCCTATACACCCCCGCTTCCTTATGCTATAGGTGATGGTATAGCTTAGCCTATAGGTGTGGGTTATTGACCATTATTGACCAC
TCCCCTATTGGTGACGATACTTTCCATTACTAATCCATAACATGGCTCTTTGCCACAACTATCTCTATTGGCTATATGCCAATACTCTGTCCTTCAG
AGACTGACACGGACTCTGTATTTTTTACAGGATGGGGTCCCATTTATTATTTTACAAATTCACATATACAACAACGCCGTCCCCCGTGCCCGCAGTTTT
TATTAAACATAGCGTGGGATCTCCACGCGAATCTCGGGTACGTGTTCCGGACATGGGCTCTTCTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCT
GGTCCCATGCCTCCAGCGGCTCATGGTCGCTCGGCAGCTCCTTGCTCCTAACAGTGGAGGCCAGACTTAGGCACAGCACAATGCCCACCACCACCAG
TGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG
GCAGAAGAAGATGCAGGCAGCTGAGTTGTTGTATTCTGATAAGAGTCAGAGGTAACTCCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCT
GAGCAGTACTCGTTGCTGCCGCGCGCGCCACCAGACATAATAGCTGACAGACTAACAGACTGTTCCTTTCCATGGGTCTTTTCTGCAGTCACCGTCg
tcgacgccaccatgggccagaccaagagcaagatcaagagcaagtacgccagctacctgagcttcatcaagatcctgctgaagcgcggcggcgtgaa
ggtgagcaccaagaacctgatcaagctgttccagatcatcgagcagttctgcccctggttccccgagcagggcaccctggacctgaaggactggaag
cgcatcggcaaggagctgaagcaggccggccgcaagggcaacatcatccccctgaccgtgtgtggaacgactgggccatcatcaaggccgccctggagc
ccttccagaccgaggaggacagcgtgagcgtgagcgacgcccccggcagctgcatcatcgactgcaacgagaacacccgcaagaagagccagaagga
gaccgagggcctgcactgcgagtacgtggccgagcccgtgatggcccagagcacccagaacgtggactacaaccagctgcaggaggtgatctacccc
gagaccctgaagctggagggcaagggccccgagctggtgggccccagcgagagcaagccccgcggcaccagccccctgcccgccggccaggtgcccg
tgaccctgcagccccagaagcaggtgaaggagaacaagacccagccccccgtggcctaccagtactggccccccgcgagctgcagtaccgcccccc
ccccgagagccagtacggctacccccggcatgccccccgcccccccagggccgcgcccccctaccccagcccccccacccgccgcctgaacccaccgcc
cccccagccgccagggcagcaagctgcacgagatcatcgacaagagccgcaaggagggcgacaccgaggcctggcagttccccgtgaccctggagc
ccatgccccccggcgagggcgcccaggagggcgagcccccaccgtggaggcccgctacaagagcttcagcatcaagaagctgaaggacatgaagga
gggcgtgaagcagtacggccccaacagcccctacatgcgcaccctgctggacagcatcgcccacggccaccgcctgatcccctacgactgggagatc
ctggccaagagcagcctgagccccagccagttcctgcagttcaagacctggtggatcgacggcgtgcaggagcaggtgcgccgcaaccgcgccgcca
acccccccgtgaacatcgacgccgaccagctgctgggcatcggccagaactggagcaccatcagccagcaggccctgatgcagaacgaggccatcga
gcaggtgcgcgccatctgcctgcgcgcctgggagaagatccaggaccccggcagcacctgccccagcttcaacaccgtgcgccagggcagcaaggag
ccctacccccgacttcgtggcccgcctgcaggacgtggcccagaagagcatcgccgacgagaaggcccgcaaggtgatcgtggagctgatggcctacg
agaacgccaaccccgagtgccagagcgccatcaagcccctgaagggcaaggtgcccgccggcagcgacgtgatcagcgagtacgtgaaggcctgcga
cggcatcggcggcgccatgcacaaggccatgctgatggcccaggccatcaccggcgtggtgctgggcggccaggtgcgcaccttcggccgcaagtgc
tacaactgcggccagatcggccacctgaagaagaactgccccgtgctgaacaagcagaacatcaccatccaggccaccaccaccggccgcgagcccc
ccgacctgtgccccgctgcaagaagggcaagcactgggccagccagtgccgcagcaagttcgacaagaacggccagccccctgagcggcaacgagca
gcgcggccagcccccaggccccccagcagaccggcgcctccccatccagcccttcgtgccccagggcttccagggccagcagcccccccctgagccag
gtgttccagggcatcagccagctgccccagtacaacaactgcccccccccccaggccgccgtgcagcaggcttaaagaattcAGACTCGAGCAAGTC
TAGAAAGCCATGGATATCGGATCCACTACGCGTTAGAGCTCGCTGATCAGCCTCGACTGTGCCTTCTAGTTGCCAGCCATCTGTTGTTTGCCCCTCC
CCCGTGCCTTCCTTGACCCTGGAAGGTGCCACTCCCACTGTCCTTTCCTAATAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTA
TTCTGGGGGGTGGGGTGGGGCAGGACAGCAAGGGGGAGGATTGGGAAGACAATAGCAGGGGGGTGGGCGAAGAACTCCAGCATGAGATCCCCGCGCT
GGAGGATCATCCAGCCGGCGTCCCGGAAAACGATTCCGAAGCCCAACCTTTCATAGAAGGCGGCGGTGGAATCGAAATCTCGTGATGGCAGGTTGGG
CGTCGCTTGGTCGGTCATTTCGAACCCCAGAGTCCCGCTCAGAAGAACTCGTCAAGAAGGCGATAGAAGGCGATGCGCTGCGAATCGGGAGCGGCGA
TACCGTAAAGCACGAGGAAGCGGTCAGCCCATTCGCCGCCAAGCTCTTCAGCAATATCACGGGTAGCCAACGCTATGTCCTGATAGCGGTCCGCCAC
ACCCAGCCGGCCACAGTCGATGAATCCAGAAAAGCGGCCATTTTCCACCATGATATTCGGCAAGCAGGCATCGCCATGGGTCACGACGAGATCCTCG
CCGTCGGGCATGCGCGCCTTGAGCCTGGCGAACAGTTCGGCTGGCGCGAGCCCCTGATGCTCTTCGTCCAGATCATCCTGATCGACAAGACCGGCTT
CCATCCGAGTACGTGCTCGCTCGATGCGATGTTTCGCTTGGTGGTCGAATGGGCAGGTAGCCGGATCAAGCGTATGCAGCCGCCGCATTGCATCAGC

CATGATGGATACTTTCTCGGCCAGGAGCAAGGTGAGATGACAGGAGATCCTGCCCCGGCACTTCGCCCAATAGCAGCCAGTCCCTTCCCGCTTCAGTG
ACAACGTCGAGCACAGCTGCGCAAGGAACGCCCGTCGTGGCCAGCCACGATAGCCGCGCTGCCTCGTCCTGCAGTTCATTCAGGGCACCGGACAGGT
CGGTCTTGACAAAAAGAACCGGGCGCCCCTGCGCTGACAGCCGGAACACGGCGGCATCAGAGCAGCCGATTGTCTGTTGTGCCCAGTCATAGCCGAA
TAGCCTCTCCACCCAAGCGGCCGGAGAACCTGCGTGCAATCCATCTTGTTCAATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGATCTTGAT
CCCCTGCGCCATCAGATCCTTGGCGGCAAGAAAGCCATCCAGTTTACTTTGCAGGGCTTCCCAACCTTACCAGAGGGCGCCCCAGCTGGCAATTCCG
GTTCGCTTGCTGTCCATAAAACCGCCCAGTCTAGCTATCGCCATGTAAGCCCACTGCAAGCTACCTGCTTTCTCTTTGCGCTTGCGTTTTCCCTTGT
CCAGATAGCCCAGTAGCTGACATTCATCCGGGGTCAGCACCGTTTCTGCGGACTGGCTTTCTACGTGTTCCGCTTCCTTTAGCAGCCCTTGCGCCCT
GAGTGCTTGCGGCAGCGTGAAGCTAATTCATGGTTAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATA
AATCAAAAGAATAGCCCGAGATAGGGTTGAGTGTTGTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAA
AACCGTCTATCAGGGCGATGGCCCGGATCAGCTTATGCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAATACCGCATCAGGCGCTCTTCCGCTT
CCTCGCTCACTGACTCGCTGCGCTCGGTCGTTCGGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGA
TAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCCT
GACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGC
GCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCT
CAGTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAG
TCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGA
AGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTG
ATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATC
TTTTCTACTGAACGGTGATCCCCACCGGAATTGCG

SEQ ID 55

GCCGCGGAATTTCGACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGA
CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATG
GCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCA
ATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGG
CCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT
TTTGGCAGTACACCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTTTTGGCACCA
AAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCT
CGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGCGGCCGGGAAC
GGTGCATTGGAACGCGGATTCCCCGTGCCAAGAGTGACGTAAGTACCGCCTATAGACTCTATAGGCACACCCCTTTGGCTCTTATGCATGCTATACT
GTTTTTGGCTTGGGGCCTATACACCCCCGCTTCCTTATGCTATAGGTGATGGTATAGCTTAGCCTATAGGTGTGGGTTATTGACCATTATTGACCAC
TCCCCTATTGGTGACGATACTTTCCATTACTAATCCATAACATGGCTCTTTGCCACAACTATCTCTATTGGCTATATGCCAATACTCTGTCCTTCAG
AGACTGACACGGACTCTGTATTTTTACAGGATGGGGTCCCATTTATTATTTACAAATTCACATATACAACAACGCCGTCCCCCGTGCCCGCAGTTTT
TATTAAACATAGCGTGGGATCTCCACGCGAATCTCGGGTACGTGTTCCGGACATGGGCTCTTCTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCT
GGTCCCATGCCTCCAGCGGCTCATGGTCGCTCGGCAGCTCCTTGCTCCTAACAGTGGAGGCCAGACTTAGGCACAGCACAATGCCCACCACCACCAG
TGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG
GCAGAAGAAGATGCAGGCAGCTGAGTTGTTGTATTCTGATAAGAGTCAGAGGTAACTCCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCT
GAGCAGTACTCGTTGCTGCCGCGCGCGCCACCAGACATAATAGCTGACAGACTAACAGACTGTTCCTTTCCATGGGTCTTTTCTGCAGTCACCGTCg
tcgacgccaccatgtgggccaccatcgtgggcaagcgcgccaagggccccgccagcggccccaccaccaactgggggcatccccaacagcgccatctg
cagcagcggcttcagcggcaccaccaccccaccgtgcccagcgtgagcggcaacaagcccgtgaccaccatccagcagctgagccccgccaccagc
ggcagcgccgccgtggacctgtgcaccatccaggccgtgagcctgctgcccggcgagccccccagaagacccccaccggcgtgtacgcccccctgc
ccaagggcaccgtgggcctgatcctgggccgcagcagcctgaacctgaagggcgtgcagatccacaccagcgtggtggacagcgactacaagggcga
gatccagctggtgatcagcagcagcatcccctggagcgccagcccccgcgaccgcatcgcccagctgctgctgctgccctacatcaagggcggcaac
agcgagatcaagcgcatcggcggcctgggcagcaccgaccccaccggcaaggccgcctactgggccagccaggtgagcgagaaccgccccgtgtgca
aggccatcatccagggcaagcagttcgagggcctggtggacaccggcgccgacgtgagcatcatcgccctgaaccagtggcccaagaactggcccaa
gcagaaggccgtgaccggcctggtgggcatcggcaccgccagcgaggtgtaccagagcaccgagatcctgcactgcctgggccccgacaaccaggag
agcaccgtgcagcccatgatcaccagcatccccctgaacctgtggggccgcgacctgctgcagcagtggggcgccgagatcaccatgcccgcccca
gctacagccccaccagccagaagatcatgaccaagatgggctacatccccggcaagggcctgggcaagaacgaggacggcatcaagatcccgtgga
ggccaagatcaaccaggagcgcgagggcatcggcaacccctgcgcttaaagaattcAGACTCGAGCAAGTCTAGAAAGCCATGGATATCGGATCCAC
TACGCGTTAGAGCTCGCTGATCAGCCTCGACTGTGCCTTCTAGTTGCCAGCCATCTGTTGTTTGCCCCTCCCCCGTGCCTTCCTTGACCCTGGAAGG
TGCCACTCCCACTGTCCTTTCCTAATAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGGTGGGGTGGGGCAGGAC
AGCAAGGGGGAGGATTGGGAAGACAATAGCAGGGGGGTGGGCGAAGAACTCCAGCATGAGATCCCCGCGCTGGAGGATCATCCAGCCGGCGTCCCGG
AAAACGATTCCGAAGCCCAACCTTTCATAGAAGGCGGCGGTGGAATCGAAATCTCGTGATGGCAGGTTGGGCGTCGCTTGGTCGGTCATTTCGAACC
CCAGAGTCCCGCTCAGAAGAACTCGTCAAGAAGGCGATAGAAGGCGATGCGCTGCGAATCGGGAGCGGCGATACCGTAAAGCACGAGGAAGCGGTCA
GCCCATTCGCCGCCAAGCTCTTCAGCAATATCACGGGTAGCCAACGCTATGTCCTGATAGCGGTCCGCCACACCCAGCCGGCCACAGTCGATGAATC
CAGAAAAGCGGCCATTTTCCACCATGATATTCGGCAAGCAGGCATCGCCATGGGTCACGACGAGATCCTCGCCGTCGGGCATGCGCGCCTTGAGCCT
GGCGAACAGTTCGGCTGGCGCGAGCCCCTGATGCTCTTCGTCCAGATCATCCTGATCGACAAGACCGGCTTCATCCGAGTACGTGCTCGCTCGATG
CGATGTTTCGCTTGGTGGTCGAATGGGCAGGTAGCCGGATCAAGCGTATGCAGCCGCCGCATTGCATCAGCCATGATGGATACTTTCTCGGCAGGAG
CAAGGTGAGATGACAGGAGATCCTGCCCCGGCACTTCGCCCAATAGCAGCCAGTCCCTTCCCGCTTCAGTGACAACGTCGAGCACAGCTGCGCAAGG

AACGCCCGTCGTGGCCAGCCACGATAGCCGCGCTGCCTCGTCCTGCAGTTCATTCAGGGCACCGGACAGGTCGGTCTTGACAAAAAGAACCGGGCGC
CCCTGCGCTGACAGCCGGAACACGGCGGCATCAGAGCAGCCGATTGTCTGTTGTGCCCAGTCATAGCCGAATAGCCTCTCCCACCCAAGCGGCCGGAG
AACCTGCGTGCAATCCATCTTGTTCAATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGATCTTGATCCCCTGCGCCATCAGATCCTTGGCGG
CAAGAAAGCCATCCAGTTTACTTTGCAGGGCTTCCCAACCTTACCAGAGGGCGCCCCAGCTGCAATTCCGGTTCGCTTGCTGTCCATAAAACCGCC
CAGTCTAGCTATCGCCATGTAAGCCCACTGCAAGCTACCTGCTTTCTCTTTGCGCTTGCGTTTTCCCTTGTCCAGATAGCCCAGTAGCTGACATTCA
TCCGGGGTCAGCACCGTTTCTGCGGACTGGCTTTCTACGTGTTCCGCTTCCTTTAGCAGCCCTTGCGCCCTGAGTGCTTGCGGCAGCGTGAAGCTAA
TTCATGGTTAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGCCCGAGATAGGG
TTGAGTGTTGTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTATCAGGGCGATGGCCGGA
TCAGCTTATGCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAATACCGCATCAGGCGCTCTTCCGCTTCCTCGCTCACTGACTCGCTGCGCTCG
GTCGTTCGGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAA
AAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCCTGACGAGCATCACAAAAATCGACGCTC
AAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTT
ACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCGCTCCA
AGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATC
GCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACT
AGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTA
GCGGTGGTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACTGAACGGTGATCCCCACC
GGAATTGCG

SEQ ID 56

GCCGCGGAATTTCGACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGA
CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATG
GCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCA
ATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGG
CCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT
TTTGGCAGTACACCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTTTTGGCACCA
AAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCT
CGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGCGGCCGGGAAC
GGTGCATTGGAACGCGGATTCCCCGTGCCAAGAGTGACGTAAGTACCGCCTATAGACTCTATAGGCACACCCCTTTGGCTCTTATGCATGCTATACT
GTTTTTGGCTTGGGGCCTATACACCCCGCTTCCTTATGCTATAGGTGATGGTATAGCTTAGCCTATAGGTGTGGGTTATTGACCATTATTGACCAC
TCCCCTATTGGTGACGATACTTTCCATTACTAATCCATAACATGGCTCTTTGCCACAACTATCTCTATTGGCTATATGCCAATACTCTGTCCTTCAG
AGACTGACACGGACTCTGTATTTTTACAGGATGGGGTCCCATTTATTATTTACAAATTCACATATACAACAACGCCGTCCCCCGTGCCCGCAGTTTT
TATTAAACATAGCGTGGGATCTCCACGCGAATCTCGGGTACGTGTTCCGGACATGGGCTCTTCTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCT
GGTCCCATGCCTCCAGCGGCTCATGGTCGCTCGGCAGCTCCTTGCTCCTAACAGTGGAGGCCAGACTTAGGCACAGCACAATGCCCACCACCACCAG
TGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG
GCAGAAGAAGATGCAGGCAGCTGAGTTGTTGTATTCTGATAAGAGTCAGAGGTAACTCCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCT
GAGCAGTACTCGTTGCTGCCGCGCGCGCCACCAGACATAATAGCTGACAGACTAACAGACTGTTCCTTTCCATGGGTCTTTTCTGCAGTCACCGTCg
tcgacgccaccatgaacaagagccgcaagcgccgcaaccgcgagagcctgctgggcgccgccaccgtggagcccccaagcccatcccctgacctg
gaagaccgagaagcccgtgtgggtgaaccagtggcccctgcccaagcagaagctggaggccctgcacctgctggccaacgagcagctggagaagggc
cacatcgagcccagcttcagcccctggaacagccccgtgttcgtgatccagaagaagagcggcaagtggcgcatgctgaccgacctgcgcgccgtga
acgccgtgatccagcccatgggccccctgcagcccggcctgcccagccccgccatgatccccaaggactggcccctgatcatcatcgacctgaagga
ctgcttcttcaccatcccccctggccgagcaggactgcgagaagttcgccttcaccatcccccgccatcaacaacaaggagcccgccaccgcttccag
tggaaggtgctgccccagggcatgctgaacagccccaccatctgccagaccttcgtgggccgcgccctgcagcccgtgcgcgagaagttcagcgact
gctacatcatccactgcatcgacgacatcctgtgcgccgccgagaccaaggacaagctgatcgactgctacaccttcctgcaggccgaggtggccaa
cgccggcctggccatcgccagcgacaagatccagaccagcacccccttccactacctgggcatgcagatcgagaaccgcaagatcaagccccagaag
atcgagatccgcaaggacacccctgaagaccctgaacgacttccagaagctgctgggcgacatcaactggatccgccccaccctgggcatccccacct
acgccatgagcaacctgttcagcatcctgcgcggcgacagcgacctgaacagcaagcgcatgctgacccccgaggccaccaaggagatcaagctggt
ggaggagaagatccagagcgcccagatcaaccgcatcgacccctggccccctgcagctgctgatcttcgccaccgcccacagcccaccggcatc
atcatccagaacaccgacctggtggagtggagcttcctgcccacagcaccgtgaagacctcacccgtacctggaccagatcgccaccctgatcg
gccagacccgcctgcgcatcatcaagctgtgcgcggcaacgaccccgacaagatcgtggtgcccctgaccaaggagcaggtgcgccaggccttcatcaa
cagcggcgcctggaagatcggcctggccaacttcgtgggcatcatcgacaaccactacccaagaccaagatcttccagttcctgaagctgaccacc
tggatcctgcccaagatcacccgccgcgagcccctggagaacgccctgaccgtgttcaccgacggcagcagcaacggcaaggccgcctacaccggcc
ccaaggagcgcgtgatcaagaccccctaccagagcgcccagcgcgccgagctggtggccgtgatcaccgtgctgcaggacttcgaccagcccatcaa
catcatcagcgacagcgcctacgtggtgcaggccacccgcgacgtggagaccgccctgatcaagtacagcatggacgaccagctgaaccagctgttc
aacctgctgcagcagaccgtgcgcaagcgcaacttccccttctacatcacccacatccgcgcccacaccaacctgcccggcccctgaccaaggcca
acgagcaggccgacctgctggtgagcagcgccctgatcaagggcccaggagctgcacgccctgacccacgtgaacgccgccggcctgaagaacaagtt
cgacgtgacctggaagcaggccaaggacatcgtgcagcactgcacccagtgccaggtgctgcacctgcccacccaggaggccggcgtgaaccccgc
ggcctgtgcccaacgccctgtggcagatggacgtgacccacgtgcccagcttcggccgcctgagctacgtgcacgtgaccgtggacacctacagcc
acttcatctgggccacctgccagaccggcgagagcaccagccacgtgaagaagcacctgctgagctgcttcgccgtgatgggcgtgcccgagaagat

caagaccgacaacggccccggctactgcagcaaggccttccagaagttcctgagccagtggaagatcagccacaccaccggcatcccctacaacagc
cagggccaggccatcgtggagcgcaccaaccgcaccctgaagacccagctggtgaagcagaaggagggcggccgacagcaaggagtgcaccacccccc
agatgcagctgaacctggccctgtacaccctgaacttcctgaacatctaccgcaaccagaccaccaccagcgccgagcagcacctgaccggcaagaa
gaacagcccccacgagggcaagctgatctggtggaaggacaacaagaacaagacctgggagatcggcaaggtgatcacctggggccgcggcttcgcc
tgcgtgagccccggcgagaaccagctgcccgtgtggatcccccacccgccacctgaagttctacaacgagcccatccgcgacgccaagaagagcacca
gcgccgagaccgagaccagccagagcagcaccgtggacagccaggacgagcagaacggcgacgtgcgccgcaccgacgaggtggccatccaccagga
gggccgcgccgccaacctgggcaccaccaaggaggccgacgccgtgagctacaagatcagccgcgagcacaagggcgacaccaacccccgcgagtac
gccgcctgcagcctggacgactgcatcaacggcggcaagagcccctacgcctgccgcagcagctgcagcttaaagaattcAGACTCGAGCAAGTCTA
GAAAGCCATGGATATCGGATCCACTACGCGTTAGAGCTCGCTGATCAGCCTCGACTGTGCCTTCTAGTTGCCAGCCATCTGTTGTTTGCCCCTCCCC
CGTGCCTTCCTTGACCCTGGAAGGTGCCACTCCCACTGTCCTTTCCTAATAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTATT
CTGGGGGGTGGGGTGGGGCAGGACAGCAAGGGGGAGGATTGGGAAGACAATAGCAGGGGGGTGGGCGAAGAACTCCAGCATGAGATCCCCGCGCTGG
AGGATCATCCAGCCGGCGTCCCGGAAAACGATTCCGAAGCCCAACCTTTCATAGAAGGCGGCGGTGGAATCGAAATCTCGTGATGGCAGGTTGGGCG
TCGCTTGGTCGGTCATTTCGAACCCCAGAGTCCCGCTCAGAAGAACTCGTCAAGAAGGCGATAGAAGGCGATGCGCTGCGAATCGGGAGCGGCGATA
CCGTAAAGCACGAGGAAGCGGTCAGCCCATTCGCCGCCAAGCTCTTCAGCAATATCACGGGTAGCCAACGCTATGTCCTGATAGCGGTCCGCCACAC
CCAGCCGGCCACAGTCGATGAATCCAGAAAAGCGGCCATTTTCCACCATGATATTCGGCAAGCAGGCATCGCCATGGGTCACGACGAGATCCTCGCC
GTCGGGCATGCGCGCCTTGAGCCTGGCGAACAGTTCGGCTGGCGCGAGCCCCTGATGCTCTTCGTCCAGATCATCCTGATCGACAAGACCGGCTTCC
ATCCGAGTACGTGCTCGCTCGATGCGATGTTTCGCTTGGTGGTCGAATGGGCAGGTAGCCGGATCAAGCGTATGCAGCCGCCGCATTGCATCAGCCA
TGATGGATACTTTCTCGGCAGGAGCAAGGTGAGATGACAGGAGATCCTGCCCCGGCACTTCGCCCAATAGCAGCCAGTCCCTTCCCGCTTCAGTGAC
AACGTCGAGCACAGCTGCGCAAGGAACGCCCGTCGTGGCCAGCCACGATAGCCGCGCTGCCTCGTCCTGCAGTTCATTCAGGGCACCGGACAGGTCG
GTCTTGACAAAAAGAACCGGGCGCCCCTGCGCTGACAGCCGGAACACGGCGGCATCAGAGCAGCCGATTGTCTGTTGTGCCCAGTCATAGCCGAATA
GCCTCTCCACCCAAGCGGCCGGAGAACCTGCGTGCAATCCATCTTGTTCAATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGATCTTGATCC
CCTGCGCCATCAGATCCTTGGCGGCAAGAAAGCCATCCAGTTTACTTTGCAGGGCTTCCCAACCTTACCAGAGGGCGCCCCAGCTGGCAATTCCGGT
TCGCTTGCTGTCCATAAAACCGCCCAGTCTAGCTATCGCCATGTAAGCCCACTGCAAGCTACCTGCTTTCTCTTTGCGCTTGCGTTTTCCCTTGTCC
AGATAGCCCAGTAGCTGACATTCATCCGGGGTCAGCACCGTTTCTGCGGACTGGCTTTCTACGTGTTCCGCTTCCTTTAGCAGCCCTTGCGCCCTGA
GTGCTTGCGGCAGCGTGAAGCTAATTCATGGTTAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAA
TCAAAAGAATAGCCCGAGATAGGGTTGAGTGTTGTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAA
CCGTCTATCAGGGCGATGGCCGGATCAGCTTATGCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAATACCGCATCAGGCGCTCTTCCGCTTCC
TCGCTCACTGACTCGCTGCGCTCGGTCGTTCGGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATA
ACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCCTGA
CGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGC
TCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCA
GTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACCGCTGCGCCTTATCGGTAACTATCGTCTTGAGTC
CAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAG
TGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGAT
CCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTT
TTCTACTGAACGGTGATCCCCACCGGAATTGCG

SEQ ID 57
ATGAACCCATCAGAGATGCAAAGAAAAGCACCTCCGCGGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGT
CAGAAGAACAGATGAAGTTGCCATCCACCAAGAAGGCAGAGCCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAAATATCTAGA
GAACACAAAGGTGACACAAACCCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGTCTGCAGGTGTACCCAACAGCTCCGAAGAG
ACAGCGACCATCGAGAACGGGCCATGA

SEQ ID 58
ATGAACCCCAGCGAGATGCAGCGCAAGGCCCCCCCCCGCCGCCGCCGCCACCGCAACCGCGCCCCCCTGACCCACAAGATGAACAAGATGGTGACCA
GCGAGGAGCAGATGAAGCTGCCCAGCACCAAGAAGGCCGAGCCCCCCACCTGGGCCCAGCTGAAGAAGCTGACCCAGCTGGCCACCAAGTACCTGGA
GAACACCAAGGTGACCCAGACCCCCGAGAGCATGCTGCTGGCCGCCCTGATGATCGTGAGCATGGTGAGCGCCGGCGTGCCCAACAGCAGCGAGGAG
ACCGCCACCATCGAGAACGGCCCCGCTTAA

SEQ ID 59
ATGAACCCATCGGAGATGCAAAGAAAAGCACCTCCGCGGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGT
CAGAAGAACAGATGAAGTTGCCATCCACCAAGAAGGCAGAGCCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAAATATCTAGA
GAACACAAAGGTGACACAAACCCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGGTGTACCCAACAGCTCCGAAGAGACAGCGA
CCATCGAGAACGGGCCATGATGACGATGGCGGTTTTGTCGAAAAGAAAAGGGGGAAATGTGGGGAAAAGCAAGAGAGATCAGATTGTTACTGTGTCT
GTGTAGAAAGAAGTAGACATAGGAGACTCCATTTTGTTCTGTACTAA

SEQ ID 60
ATGAACCCCAGCGAGATGCAGCGCAAGGCCCCCCCCCGCCGCCGCCGCCACCGCAACCGCGCCCCCCTGACCCACAAGATGAACAAGATGGTGACCA
GCGAGGAGCAGATGAAGCTGCCCAGCACCAAGAAGGCCGAGCCCCCCACCTGGGCCCAGCTGAAGAAGCTGACCCAGCTGGCCACCAAGTACCTGGA
GAACACCAAGGTGACCCAGACCCCCGAGAGCATGCTGCTGGCCGCCCTGATGATCGTGAGCATGGTGGTGTACCCCACCGCCCCCAAGCGCCAGCGC

CCCAGCCGCACCGGCCACGACGACGACGGCGGCTTCGTGGAGAAGAAGCGCGGCAAGTGCGGCGAGAAGCAGGAGCGCAGCGACTGCTACTGCGTGT
GCGTGGAGCGCAGCCGCCACCGCCGCCTGCACTTCGTGCTGTACGCTTAA

SEQ ID 61

ATGGGGCAAACTAAAAGTAAAATTAAAAGTAAATATGCCTCTTATCTCAGCTTTATTAAAATTCTTTTAAAAAGAGGGGGAGTTAAAGTATCTACAA
AAAATCTAATCAAGCTATTTCAAATAATAGAACAATTTTGCCCATGGTTTCCAGAACAAGGAACTTTAGATCTAAAAGATTGGAAAAGAATTGGTAA
GGAACTAAAACAAGCAGGTAGGAAGGGTAATATCATTCCACTTACAGTATGGAATGATTGGGCCATTATTAAAGCAGCTTTAGAACCATTTCAAACA
GAAGAAGATAGCGTTTCAGTTTCTGATGCCCCTGGAAGCTGTATAATAGATTGTAATGAAAACACAAGGAAAAAATCCCAGAAAGAAACGGAAGGTT
TACATTGCGAATATGTAGCAGAGCCGGTAATGGCTCAGTCAACGCAAAATGTTGACTATAATCAATTACAGGAGGTGATATATCCTGAAACGTTAAA
ATTAGAAGGAAAAGGTCCAGAATTAGTGGGGGCCATCAGAGTCTAAACCACGAGGCACAAGTCCTCTTCCAGCAGGTCAGGTGCCTGTAACATTACAA
CCTCAAAAGCAGGTTAAAGAAAATAAGACCCAACCGCCAGTAGCCTATCAATACTGGCCTCCGGCTGAACTTCAGTATCGGCCACCCCCAGAAAGTC
AGTATGGATATCCAGGAATGCCCCCAGCACCACAGGGCAGGGCGCCATACCCTCAGCCGCCCACTAGGAGACTTAATCCTACGGCACCACCTAGTAG
ACAGGGTAGTAAATTACATGAAATTATTGATAAATCAAGAAAGGAAGGAGATACTGAGGCATGGCAATTCCCAGTAACGTTAGAACCGATGCCACCT
GGAGAAGGAGCCCAAGAGGGAGAGCCTCCCACAGTTGAGGCCAGATACAAGTCTTTTTCGATAAAAAAGCTAAAAGATATGAAAGAGGGAGTAAAAC
AGTATGGACCCAACTCCCCTTATATGAGGACATTATTAGATTCCATTGCTCATGGACATAGACTCATTCCTTATGATTGGGAGATTCTGGCAAAATC
GTCTCTCTCACCCTCTCAATTTTTACAATTTAAGACTTGGTGGATTGATGGGGTACAAGAACAGGTCCGAAGAAATAGGGCTGCCAATCCTCCAGTT
AACATAGATGCAGATCAACTATTAGGAATAGGTCAAAAATTGGAGTACTATTAGTCAACAAGCATTAATGCAAAATGAGGCCATTGAGCAAGTTAGAG
CTATCTGCCTTAGAGCCTGGGAAAAAATCCAAGACCCAGGAAGTACCTGCCCCTCATTTAATACAGTAAGACAAGGTTCAAAAGAGCCCTATCCTGA
TTTTGTGGCAAGGCTCCAAGATGTTGCTCAAAAGTCAATTGCTGATGAAAAAGCCCGTAAGGTCATAGTGGAGTTGATGGCATATGAAAACGCCAAT
CCTGAGTGTCAATCAGCCATTAAGCCATTAAAAAGGAAAGGTTCCTGCAGGATCAGATGTAATCTCAGAATATGTAAAAGCCTGTGATGGAATCGGAG
GAGCTATGCATAAAGCTATGCTTATGGCTCAAGCAATAACAGGAGTTGTTTTAGGAGGACAAGTTAGAACATTTGGAAGAAAATGTTATAATTGTGG
TCAAATTGGTCACTTAAAAAAGAATTGCCCAGTCTTAAATAAACAGAATATAACTATTCAAGCAACTACAACAGGTAGAGAGCCACCTGACTTATGT
CCAAGATGTAAAAAAGGAAAACATTGGGCTAGTCAATGTCGTTCTAAATTTGATAAAAATGGGCAACCATTGTCGGGAAACGAGCAAAGGGGCCAGC
CTCAGGCCCCACAACAAACTGGGGCATTCCCAATTCAGCCATTTGTTCCTCAGGGTTTTCAGGGACAACAACCCCCACTGTCCCAAGTGTTTCAGGG
AATAAGCCAGTTACCACAATACAACAATTGTCCCCCGCCACAAGCGGCAGTGCAGCAGTAG

SEQ ID 62

ATGGGGCCAGACCAAGAGCAAGATCAAGAGCAAGTACGCCAGCTACCTGAGCTTCATCAAGATCCTGCTGAAGCGCGGCGGCGTGAAGGTGAGCACCA
AGAACCTGATCAAGCTGTTCCAGATCATCGAGCAGTTCTGCCCCTGGTTCCCCGAGCAGGGCACCCTGGACCTGAAGGACTGGAAGCGCATCGGCAA
GGAGCTGAAGCAGGCCGGCCGCAAGGGCAACATCATCCCCCTGACCGTGTGGAACGACTGGGCCATCATCAAGGCCGCCCTGGAGCCCTTCCAGACC
GAGGAGGACAGCGTGAGCGTGAGCGACGCCCCCGGCAGCTGCATCATCGACTGCAACGAGAACACCCGCAAGAAGAGCCAGAAGGAGACCGAGGGCC
TGCACTGCGAGTACGTGGCCGAGCCCGTGATGGCCCAGAGCACCCAGAACGTGGACTACAACCAGCTGCAGGAGGTGATCTACCCCGAGACCCTGAA
GCTGGAGGGCAAGGGCCCCGAGCTGGTGGGCCCCAGCGAGAGCAAGCCCCGCGGCACCAGCCCCCTGCCCGCCGGCCAGGTGCCCGTGACCCTGCAG
CCCCAGAAGCAGGTGAAGGAGAACAAGACCCAGCCCCCCGTGGCCTACCAGTACTGGCCCCCCGCCGAGCTGCAGTACCGCCCCCCCCCCGAGAGCC
AGTACGGCTACCCCGGCATGCCCCCCGCCCCCCAGGGCCGCGCCCCCTACCCCCAGCCCCCCACCCGCCGCCTGAACCCCACCGCCCCCCCCAGCCG
CCAGGGCAGCAAGCTGCACGAGATCATCGACAAGAGCCGCAAGGAGGGCGACACCGAGGCCTGGCAGTTCCCCGTGACCCTGGAGCCCATGCCCCCC
GGCGAGGGCGCCCAGGAGGGCGAGCCCCCCACCGTGGAGGCCCGCTACAAGAGCTTCAGCATCAAGAGCTGAAGGACATGAAGGAGGGCGTGAAGC
AGTACGGCCCCAACAGCCCCTACATGCGCACCCTGCTGGACAGCATCGCCCACGGCCACCGCCTGATCCCCTACGACTGGGAGATCCTGGCCAAGAG
CAGCCTGAGCCCCAGCCAGTTCCTGCAGTTCAAGACCTGGTGGATCGACGGCGTGCAGGAGCAGGTGCGCCGCAACCGCGCCGCCAACCCCCCCGTG
AACATCGACGCCGACCAGCTGCTGGGCATCGGCCAGAACTGGAGCACCATCAGCCAGCAGGCCCTGATGCAGAACGAGGCCATCGAGCAGGTGCGCG
CCATCTGCCTGCGCGCCCTGGGAGAAGATCCAGGACCCCGGCAGCACCTGCCCCAGCTTCAACACCGTGCGCCAGGGCAGCAAGGAGCCCTACCCCGA
CTTCGTGGCCCGCCTGCAGGACGTGGCCCAGAAGAGCATCGCCGACGAGAAGGCCCGCAAGGTGATCGTGGAGCTGATGGCCTACGAGAACGCCAAC
CCCGAGTGCCAGAGCGCCATCAAGCCCCTGAAGGGCAAGGTGCCCGCCGGCAGCGACGTGATCAGCGAGTACGTGAAGGCCTGCGACGGCATCGGCG
GCGCCATGCACAAGGCCATGCTGATGGCCCAGGCCATCACCGGCGTGGTGCTGGGCGGCCAGGTGCGCACCTTCGGCCGCAAGTGCTACAACTGCGG
CCAGATCGGCCACCTGAAGAAGAACTGCCCCGTGCTGAACAAGCAGAACATCACCATCCAGGCCACCACCACCGGCCGCGAGCCCCCCGACCTGTGC
CCCCGCTGCAAGAAGGGCAAGCACTGGGCCAGCCAGTGCCGCAGCAAGTTCGACAAGAACGGCCAGCCCCTGAGCGGCAACGAGCAGCGCGGCCAGC
CCCAGGCCCCCCAGCAGACCGGCGCCTTCCCCATCCAGCCCTTCGTGCCCCAGGGCTTCCAGGGCCAGCAGCCCCCCCTGAGCCAGGTGTTCCAGGG
CATCAGCCAGCTGCCCCAGTACAACAACTGCCCCCCCCCCCCAGGCCGCCGTGCAGCAGGCTTAA

SEQ ID 63

ATGTGGGCAACCATTGTCGGGAAACGAGCAAAGGGGCCAGCCTCAGGCCCCACAACAAACTGGGGCATTCCCAATTCAGCCATTTGTTCCTCAGGGT
TTTCAGGGACAACAACCCCCACTGTCCCAAGTGTTTCAGGGAATAAGCCAGTTACCACAATACAACAATTGTCCCCCGCCACAAGCGGCAGTGCAGC
AGTAGATTTATGTACTATACAAGCAGTCTCTCTGCTTCCAGGGGAGCCCCCACAAAAAACCCCCACAGGGGTATATGGACCCCTGCCTAAGGGGACT
GTAGGACTAATCTTGGGACGATCAAGTCTAAATCTAAAAGGAGTTCAAATTCATACTAGTGTGGTTGATTCAGACTATAAAGGCGAAATTCAATTGG
TTATTAGCTCTTCAATTCCTTGGAGTGCCAGTCCAAGAGACAGGATTGCTCAATTATTACTCCTGCCATACATTAAGGGTGGAAATAGTGAAATAAA
AAGAATAGGAGGGCTTGGAAGCACTGATCCAACAGGAAAGGCTGCATATTGGGCAAGTCAGGTCTCAGAGAACAGACCTGTGTGTAAGGCCATTATT
CAAGGAAAACAGTTTGAAGGGTTGGTAGACACTGGAGCAGATGTCTCTATCATTGCTTTAAATCAGTGGCCAAAAAATTGGCCTAAACAAAAGGCTG
TTACAGGACTTGTCGGCATAGGCACAGCCTCAGAAGTGTATCAAAGTACGGAGATTTTACATTGCTTAGGGCCAGATAATCAAGAAAGTACTGTTCA
GCCAATGATTACTTCAATTCCTCTTAATCTGTGGGGTCGAGATTTATTACAACAATGGGGTGCGGAAATCACCATGCCCGCTCCATCATATAGCCCC

ACGAGTCAAAAAATCATGACCAAGATGGGATATATACCAGGAAAGGGACTAGGGAAAAATGAAGATGGCATTAAAATTCCAGTTGAGGCTAAAATAA
ATCAAGAAAGAGAAGGAATAGGGAATCCTTGCTAG

SEQ ID 64

ATGTGGGCCACCATCGTGGGCAAGCGCGCCAAGGGCCCCGCCAGCGGCCCCACCACCAACTGGGGCATCCCCAACAGCGCCATCTGCAGCAGCGGCT
TCAGCGGCACCACCACCCCCACCGTGCCCAGCGTGAGCGGCAACAAGCCCGTGACCACCATCCAGCAGCTGAGCCCCGCCACCAGCGGCAGCGCCGC
CGTGGGACCTGTGCACCATCCAGGCCGTGAGCCTGCTGCCCGGCGAGCCCCCCCAGAAGACCCCCACCGGCGTGTACGGCCCCCTGCCCAAGGGCACC
GTGGGGCCTGATCCTGGGCCGCAGCAGCCTGAACCTGAAGGGCGTGCAGATCCACACCAGCGTGGTGGACAGCGACTACAAGGGCGAGATCCAGCTGG
TGATCAGCAGCAGCATCCCCTGGAGCGCCAGCCCCCGCGACCGCATCGCCCAGCTGCTGCTGCTGCCCTACATCAAGGGCGGCAACAGCGAGATCAA
GCGCATCGGCGGCCTGGGCAGCACCGACCCCACCGGCAAGGCCGCCTACTGGGCCAGCCAGGTGAGCGAGAACCGCCCCGTGTGCAAGGCCATCATC
CAGGGCAAGCAGTTCGAGGGCCTGGTGGACACCGGCGCCGACGTGAGCATCATCGCCCTGAACCAGTGGCCCAAGAACTGGCCCAAGCAGAAGGCCG
TGACCGGCCTGGTGGGCATCGGCACCGCCAGCGAGGTGTACCAGAGCACCGAGATCCTGCACTGCCTGGGCCCCGACAACCAGGAGAGCACCGTGCA
GCCCATGATCACCAGCATCCCCCTGAACCTGTGGGGCCGCGACCTGCTGCAGCAGTGGGGCGCCGAGATCACCATGCCCGCCCCCAGCTACAGCCCC
ACCAGCCAGAAGATCATGACCAAGATGGGCTACATCCCCGGCAAGGGCCTGGGCAAGAACGAGGACGGCATCAAGATCCCCGTGGAGGCCAAGATCA
ACCAGGAGCGCGAGGGCATCGGCAACCCCTGCGCTTAA

SEQ ID 65

ATGAATAAATCAAGAAAGAGAAGGAATAGGGAATCCTTGCTAGGGGCGGCCACTGTAGAGCCTCCTAAACCCATACCATTAACTTGGAAAACAGAAA
AACCAGTGTGGGTAAATCAGTGGCCGCTACCAAAACAAAAACTGGAGGCTTTACATTTATTAGCAAATGAACAGTTAGAAAAGGGTCATATTGAGCC
TTCGTTCTCACCTTGGAATTCTCCTGTGTTTGTAATTCAGAAGAAATCAGGCAAATGGCGTATGTTAACTGACTTAAGGGCTGTAAACGCCGTAATT
CAACCCATGGGGCCTCTCCAACCCGGGTTGCCCTCTCCGGCCATGATCCCAAAAGATTGGCCTTTAATTATAATTGATCTAAAGGATTGCTTTTTTA
CCATCCCTCTGGCAGAGCAGGATTGCGAAAAATTTGCCTTTACTATACCAGCCATAAATAATAAAGAACCAGCCACCAGGTTTCAGTGGAAAGTGTT
ACCTCAGGGAATGCTTAATAGTCCAACTATTTGTCAGACTTTTGTAGGTCGAGCTCTTCAACCAGTTAGAGAAAAGTTTTCAGACTGTTATATTATT
CATTGTATTGATGATATTTTTATGTGCTGCAGAAACGAAAGATAAATTAATTGACTGTTATACATTTCTGCAAGCAGAGGTTGCCAATGCTGGACTGG
CAATAGCATCTGATAAGATCCAAACCTCTACTCCTTTTCATTATTTAGGGATGCAGATAGAAAATAGAAAAATTAAGCCACAAAAAATAGAAATAAG
AAAAGACACATTAAAAACACTAAATGATTTTCAAAAATTACTAGGAGATATTAATTGGATTCGGCCAACTCTAGGCATTCCTACTTATGCCATGTCA
AATTTGTTCTCTATCTTAAGAGGAGACTCAGACTTAAATAGTAAAAGAATGTTAACCCCAGAGGCAACAAAAGAAATTAAATTAGTGGAAGAAAAA
TTCAGTCAGCGCAAATAAATAGAATAGATCCCTTAGCCCCACTCCAACTTTTGATTTTTGCCACTGCACATTCTCCAACAGGCATCATTATTCAAAA
TACTGATCTTGTGGAGTGGTCATTCCTTCCTCACAGTACAGTTAAGACTTTTACATTGTACTTGGATCAAATAGCTACATTAATCGGTCAGACAAGA
TTACGAATAATAAAATTATGTGGGAATGACCCAGACAAAATAGTTGTCCCTTTAACCAAGGAACAAGTTAGACAAGCCTTTATCAATTCTGGTGCAT
GGAAGATTGGTCTTGCTAATTTTGTGGGAATTATTGATAATCATTACCCAAAAACAAAGATCTTCCAGTTCTTAAAATTGACTACTTGGATTCTACC
TAAAATTACCAGACGTGAACCTTTAGAAAATGCTCTAACAGTATTTACTGATGGTTCCAGCAATGGAAAAGCAGCTTACACAGGACCGAAAGAACGA
GTAATCAAAACTCCATATCAATCGGCTCAAAGAGCAGAGTTGGTTGCAGTCATTACAGTGTTACAAGATTTTGACCAACCTATCAATATTATATCAG
ATTCTGCATATGTAGTACAGGCTACAAGGGATGTTGAGACAGCTCTAATTAAATATAGCATGGATGATCAGTTAAACCAGCTATTCAATTTATTACA
ACAAACTGTAAGAAAAAGAAATTTCCCATTTTATATTACACATATTCGAGCACACACTAATTTACCAGGGCCTTTGACTAAAGCAAATGAACAAGCT
GACTTACTGGTATCATCTGCACTCATAAAAGCACAAGAACTTCATGCTTTGACTCATGTAAATGCAGCAGGATTAAAAAACAAATTTGATGTCACAT
GGAAACAGGCAAAAGATATTGTACAACATTGCACCCAGTGTCAAGTCTTACACCTGCCCACTCAAGAGGCAGGAGTTAATCCCAGAGGTCTGTGTCC
TAATGCATTATGGCAAATGGATGTCACGCATGTACCTTCATTTGGAAGATTATCATATGTTCACGTAACAGTTGATACTTATTCACATTTCATATGG
GCAACTTGCCAAACAGGAGAAAGTACTTCCCATGTTAAAAAACATTTATTGTCTTGTTTTGCTGTAATGGGAGTTCCAGAAAAAAATCAAAACTGACA
ATGGACCAGGATATTGTAGTAAAGCTTTCCAAAAATTCTTAAGCTCAGTGGAAAATTTCACATACAACAGGAATTCCTTATAATTCCCAAGGACAGGC
CATAGTTGAAAGAACTAATAGAACACTCAAAACTCAATTAGTTAAACAAAAAGAAGGGGGAGACAGTAAGGAGTGTACCACTCCTCAGATGCAACTT
AATCTAGCACTCTATACTTTAAATTTTTTAAACATTTATAGAAATCAGACTACTACTTCTGCAGAACAACATCTTACTGGTAAAAAGAACAGCCCAC
ATGAAGGAAAACTAATTTGGTGGAAAGATAATAAAAATAAGACATGGGAAATAGGGAAGGTGATAACGTGGGGGGAGAGGTTTTGCTTGTGTTTCACC
AGGAGAAAATCAGCTTCCTGTTTGGATACCCACTAGACATTTGAAGTTCTACAATGAACCCATCAGAGATGCAAAGAAAAGCACCTCCGCGGAGACG
GAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGTCAGAAGAACAGATGAAGTTGCCATCCACCAAGAAGGCAGAGCCG
CCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAAATATCTAGAGAACACAAAGGTGACACAAACCCCAGAGAGTATGCTGCTTGCAG
CCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCAGGAGCAGCTGCAGCTAA

SEQ ID 66

ATGAACAAGAGCCGCAAGCGCCGCAACCGCGAGAGCCTGCTGGGCGCCGCCACCGTGGAGCCCCCCAAGCCCATCCCCCTGACCTGGAAGACCGAGA
AGCCCGTGTGGGTGAACCAGTGGCCCCTGCCCAAGCAGAAGCTGGAGGCCCTGCACCTGCTGGCCAACGAGCAGCTGGAGAAGGGCCACATCGAGCC
CAGCTTCAGCCCCTGGAACAGCCCCGTGTTCGTGATCCAGAAGAAGAGCGGCAAGTGGCGCATGCTGACCGACCTGCGCGCCGTGAACGCCGTGATC
CAGCCCATGGGCCCCCTGCAGCCCGGCCTGCCCAGCCCCGCCATGATCCCCAAGGACTGGCCCCTGATCATCATCGACCTGAAGGACTGCTTCTTCA
CCATCCCCCTGGCCGAGCAGGACTGCGAGAAGTTCGCCTTCACCATCCCCGCCATCAACAACAAGGAGCCCGCCACCCGCTTCCAGTGGAAGGTGCT
GCCCCAGGGCATGCTGAACAGCCCCACCATCTGCCAGACCTTCGTGGGCCGCGCCCTGCAGCCCGTGCGCGAGAAGTTCAGCGACTGCTACATCATC
CACTGCATCGACGACATCCTGTGCGCCGCCGAGACCAAGGACAAGCTGATCGACTGCTACACCTTCCTGCAGGCCGAGGTGGCCAACGCCGGCCTGG
CCATCGCCAGCGACAAGATCCAGACCAGCACCCCCTTCCACTACCTGGGCATGCAGATCGAGAACCGCAAGATCAAGCCCCAGAAGATCGAGATCCG
CAAGGACACCCTGAAGACCCTGAACGACTTCCAGAAGCTGCTGGGCGACATCAACTGGATCCGCCCCACCCTGGGCATCCCCACCTACGCCATGAGC
AACCTGTTCAGCATCCTGCGCGGCGACAGCGACCTGAACAGCAAGCGCATGCTGACCCCCGAGGCCACCAAGGAGATCAAGCTGGTGGAGGAGAAGA
TCCAGAGCGCCCAGATCAACCGCATCGACCCCCTGGCCCCCCTGCAGCTGCTGATCTTCGCCACCGCCCACAGCCCCACCGGCATCATCATCCAGAA

CACCGACCTGGTGGAGTGGAGCTTCCTGCCCCACAGCACCGTGAAGACCTTCACCCTGTACCTGGACCAGATCGCCACCCTGATCGGCCAGACCCGC
CTGCGCATCATCAAGCTGTGCGGCAACGACCCCGACAAGATCGTGGTGCCCCTGACCAAGGAGCAGGTGCGCCAGGCCTTCATCAACAGCGGCGCCT
GGAAGATCGGCCTGGCCAACTTCGTGGGCATCATCGACAACCACTACCCCAAGACCAAGATCTTCCAGTTCCTGAAGCTGACCACCTGGATCCTGCC
CAAGATCACCCGCCGCGAGCCCCTGGAGAACGCCCTGACCGTGTTCACCGACGGCAGCAGCAACGGCAAGGCCGCCTACACCGGCCCCAAGGAGCGC
GTGATCAAGACCCCCTACCAGAGCGCCCAGCGCGCCGAGCTGGTGGCCGTGATCACCGTGCTGCAGGACTTCGACCAGCCCATCAACATCATCAGCG
ACAGCGCCTACGTGGTGCAGGCCACCCGCGACGTGGAGACCGCCCTGATCAAGTACAGCATGGACGACCAGCTGAACCAGCTGTTCAACCTGCTGCA
GCAGACCGTGCGCAAGCGCAACTTCCCCTTCTACATCACCCACATCCGCGCCCACACCAACCTGCCCGGCCCCCTGACCAAGGCCAACGAGCAGGCC
GACCTGCTGGTGAGCAGCGCCCTGATCAAGGCCCAGGAGCTGCACGCCCTGACCCACGTGAACGCCGCCGGCCTGAAGAACAAGTTCGACGTGACCT
GGAAGCAGGCCAAGGACATCGTGCAGCACTGCACCCAGTGCCAGGTGCTGCACCTGCCCACCCAGGAGGCCGGCGTGAACCCCCGCGGCCTGTGCCC
CAACGCCCTGTGGCAGATGGACGTGACCCACGTGCCCAGCTTCGGCCGCCTGAGCTACGTGCACGTGACCGTGGACACCTACAGCCACTTCATCTGG
GCCACCTGCCAGACCGGCGAGAGCACCAGCCACGTGAAGAAGCACCTGCTGAGCTGCTTCGCCGTGATGGGCGTGCCCGAGAAGATCAAGACCGACA
ACGGCCCCGGCTACTGCAGCAAGGCCTTCCAGAAGTTCCTGAGCCAGTGGAAGATCAGCCACACCACCGGCATCCCCTACAACAGCCAGGGCCAGGC
CATCGTGGAGCGCACCAACCGCACCCTGAAGACCCAGCTGGTGAAGCAGAAGGAGGGCGGCGACAGCAAGGAGTGCACCACCCCCCAGATGCAGCTG
AACCTGGCCCTGTACACCCTGAACTTCCTGAACATCTACCGCAACCAGACCACCACCAGCGCCGAGCAGCACCTGACCGGCAAGAAGAACAGCCCCC
ACGAGGGCAAGCTGATCTGGTGGAAGGACAACAAGAACAAGACCTGGGAGATCGGCAAGGTGATCACCTGGGGCCGCGGCTTCGCCTGCGTGAGCCC
CGGCGAGAACCAGCTGCCCGTGTGGATCCCCACCCGCCACCTGAAGTTCTACAACGAGCCCATCCGCGACGCCAAGAAGAGCACCAGCGCCGAGACC
GAGACCAGCCAGAGCAGCACCGTGGACAGCCAGGACGAGCAGAACGGCGACGTGCGCCGCACCGACGAGGTGGCCATCCACCAGGAGGGCCGCGCCG
CCAACCTGGGCACCACCAAGGAGGCCGACGCCGTGAGCTACAAGATCAGCCGCGAGCACAAGGGCGACACCAACCCCCGCGAGTACGCCGCCTGCAG
CCTGGACGACTGCATCAACGGCGGCAAGAGCCCCTACGCCTGCCGCAGCAGCTGCAGCGCTTAA

SEQ ID 67

MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVSAGVPNSSEE
TATIENGPA

SEQ ID 68

MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVVYPTAPKRQR
PSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRRLHFVLYA

SEQ ID 69

MGQTKSKIKSKYASYLSFIKILLKRGGVKVSTKNLIKLFQIIEQFCPWFPEQGTLDLKDWKRIGKELKQAGRKGNIIPLTVWNDWAIIKAALEPFQT
EEDSVSVSDAPGSCIIDCNENTRKKSQKETEGLHCEYVAEPVMAQSTQNVDYNQLQEVIYPETLKLEGKGPELVGPSESKPRGTSPLPAGQVPVTLQ
PQKQVKENKTQPPVAYQYWPPAELQYRPPPESQYGYPGMPPAPQGRAPYPQPPTRRLNPTAPPSRQGSKLHEIIDKSRKEGDTEAWQFPVTLEPMPP
GEGAQEGEPPTVEARYKSFSIKKLKDMKEGVKQYGPNSPYMRTLLDSIAHGHRLIPYDWEILAKSSLSPSQFLQFKTWWIDGVQEQVRRNRAANPPV
NIDADQLLGIGQNWSTISQQALMQNEAIEQVRAICLRAWEKIQDPGSTCPSFNTVRQGSKEPYPDFVARLQDVAQKSIADEKARKVIVELMAYENAN
PECQSAIKPLKGKVPAGSDVISEYVKACDGIGGAMHKAMLMAQAITGVVLGGQVRTFGRKCYNCGQIGHLKKNCPVLNKQNITIQATTTGREPPDLC
PRCKKGKHWASQCRSKFDKNGQPLSGNEQRGQPQAPQQTGAFPIQPFVPQGFQGQQPPLSQVFQGISQLPQYNNCPPPQAAVQQ

SEQ ID 70

MGQTKSKIKSKYASYLSFIKILLKRGGVKVSTKNLIKLFQIIEQFCPWFPEQGTLDLKDWKRIGKELKQAGRKGNIIPLTVWNDWAIIKAALEPFQT
EEDSVSVSDAPGSCIIDCNENTRKKSQKETEGLHCEYVAEPVMAQSTQNVDYNQLQEVIYPETLKLEGKGPELVGPSESKPRGTSPLPAGQVPVTLQ
PQKQVKENKTQPPVAYQYWPPAELQYRPPPESQYGYPGMPPAPQGRAPYPQPPTRRLNPTAPPSRQGSKLHEIIDKSRKEGDTEAWQFPVTLEPMPP
GEGAQEGEPPTVEARYKSFSIKKLKDMKEGVKQYGPNSPYMRTLLDSIAHGHRLIPYDWEILAKSSLSPSQFLQFKTWWIDGVQEQVRRNRAANPPV
NIDADQLLGIGQNWSTISQQALMQNEAIEQVRAICLRAWEKIQDPGSTCPSFNTVRQGSKEPYPDFVARLQDVAQKSIADEKARKVIVELMAYENAN
PECQSAIKPLKGKVPAGSDVISEYVKACDGIGGAMHKAMLMAQAITGVVLGGQVRTFGRKCYNCGQIGHLKKNCPVLNKQNITIQATTTGREPPDLC
PRCKKGKHWASQCRSKFDKNGQPLSGNEQRGQPQAPQQTGAFPIQPFVPQGFQGQQPPLSQVFQGISQLPQYNNCPPPQAAVQQA

SEQ ID 71

MWATIVGKRAKGPASGPTTNWGIPNSAICSSGFSGTTTPTVPSVSGNKPVTTIQQLSPATSGSAAVDLCTIQAVSLLPGEPPQKTPTGVYGPLPKGT
VGLILGRSSLNLKGVQIHTSVVDSDYKGEIQLVISSSIPWSASPRDRIAQLLLLPYIKGGNSEIKRIGGLGSTDPTGKAAYWASQVSENRPVCKAII
QGKQFEGLVDTGADVSIIALNQWPKNWPKQKAVTGLVGIGTASEVYQSTEILHCLGPDNQESTVQPMITSIPLNLWGRDLLQQWGAEITMPAPSYSP
TSQKIMTKMGYIPGKGLGKNEDGIKIPVEAKINQEREGIGNPC

SEQ ID 72

MWATIVGKRAKGPASGPTTNWGIPNSAICSSGFSGTTTPTVPSVSGNKPVTTIQQLSPATSGSAAVDLCTIQAVSLLPGEPPQKTPTGVYGPLPKGT
VGLILGRSSLNLKGVQIHTSVVDSDYKGEIQLVISSSIPWSASPRDRIAQLLLLPYIKGGNSEIKRIGGLGSTDPTGKAAYWASQVSENRPVCKAII
QGKQFEGLVDTGADVSIIALNQWPKNWPKQKAVTGLVGIGTASEVYQSTEILHCLGPDNQESTVQPMITSIPLNLWGRDLLQQWGAEITMPAPSYSP
TSQKIMTKMGYIPGKGLGKNEDGIKIPVEAKINQEREGIGNPCA

SEQ ID 73

MNKSRKRRNRESLLGAATVEPPKPIPLTWKTEKPVWVNQWPLPKQKLEALHLLANEQLEKGHIEPSFSPWNSPVFVIQKKSGKWRMLTDLRAVNAVI
QPMGPLQPGLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMLNSPTICQTFVGRALQPVREKFSDCYII
HCIDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQTSTPPHYLGMQIENRKIKPQKIEIRKDTLKTLNDFQKLLGDINWIRPTLGIPTYAMS
NLFSILRGDSDLNSKRMLTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIIQNTDLVEWSFLPHSTVKTFTLYLDQIATLIGQTR

LRIIKLCGNDPDKIVVPLTKEQVRQAFINSGAWKIGLANFVGIIDNHYPKTKIFQFLKLTTWILPKITRREPLENALTVFTDGSSNGKAAYTGPKER
VIKTPYQSAQRAELVAVITVLQDFDQPINIISDSAYVVQATRDVETALIKYSMDDQLNQLFNLLQQTVRKRNFPFYITHIRAHTNLPGPLTKANEQA
DLLVSSALIKAQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVLHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYVHVTVDTYSHFIW
ATCQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQGQAIVERTNRTLKTQLVKQKEGGDSKECTTPQMQL
NLALYTLNFLNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDNKNKTWEIGKVITWGRGFACVSPGENQLPVWIPTRHLKFYNEPIRDAKKSTSAET
ETSQSSTVDSQDEQNGDVRRTDEVAIHQEGRAANLGTTKEADAVSYKISREHKGDTNPREYAACSLDDCINGGKSPYACRSSCS

SEQ ID 74
MNKSRKRRNRESLLGAATVEPPKPIPLTWKTEKPVWVNQWPLPKQKLEALHLLANEQLEKGHIEPSFSPWNSPVFVIQKKSGKWRMLTDLRAVNAVI
QPMGPLQPGLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMLNSPTICQTFVGRALQPVREKFSDCYII
HCIDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQTSTPFHYLGMQIENRKIKPQKIEIRKDTLKTLNDFQKLLGDINWIRPTLGIPTYAMS
NLFSILRGDSDLNSKRMLTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIIQNTDLVEWSFLPHSTVKTFTLYLDQIATLIGQTR
LRIIKLCGNDPDKIVVPLTKEQVRQAFINSGAWKIGLANFVGIIDNHYPKTKIFQFLKLTTWILPKITRREPLENALTVFTDGSSNGKAAYTGPKER
VIKTPYQSAQRAELVAVITVLQDFDQPINIISDSAYVVQATRDVETALIKYSMDDQLNQLFNLLQQTVRKRNFPFYITHIRAHTNLPGPLTKANEQA
DLLVSSALIKAQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVLHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYVHVTVDTYSHFIW
ATCQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQGQAIVERTNRTLKTQLVKQKEGGDSKECTTPQMQL
NLALYTLNFLNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDNKNKTWEIGKVITWGRGFACVSPGENQLPVWIPTRHLKFYNEPIRDAKKSTSAET
ETSQSSTVDSQDEQNGDVRRTDEVAIHQEGRAANLGTTKEADAVSYKISREHKGDTNPREYAACSLDDCINGGKSPYACRSSCSA

SEQ ID 75
TGTGGGGAAAAGAAAGAGAGATCAGACTGTTACTGTGTCTATGTAGAAAGAAATAGACATAAGAGACTCCATTTTGTTCTGTACTAAGAAAAATTCT
TCTGCTTTGAGATGCTGTTAATCTGTAACCCTAGCCCCAACCCTGTGCTCACAGAAACAGGTGCTGTGTTGACTCAAGGTTTAATGGATTCAGGGCT
GTGCAGGATGTGCTTTGTTAAACAAATGCTTGAAGGCAGCAAGCTTGTTAAGAGTCATCACCACTCCCTAATCTCAAGTAAGCAGGGCACACAAACAC
TGCGGAAGGCCGCAGGGACCTCTGCCTAGGAAAGCCAGGTGTTGTCCAAGGTTTCTCCCCATGTGACAGTCTGAAATATGGCCTCTTGGGAAGGGAA
AGACCTGACTGTCCCCTGGCCCGACACCCGTAAAGGGTCTGTGCTGAGGATTAGTAAAAGAGGAAGGAAGGCCTCTTTGCAGTTGAGATAAGAGGAA
GGCATCTGTCTCCTGCTCATCCCTGGGCAATGGAATGTCTTGGTGTAAAGCCTGATTGTATATGCCATCTACTGAGATAGGAGAAAACTGCCTTAGG
GCTGGAGGTGGGACATGCTGGCGGCAATACTGCTCTTTAAGGCATTGAGATGTTTATGTATATGCACATCAAAAGCACAGCACTTTTTTCTTTACCT
TGTTTATGATGCAGAGACATTTGTTCACATGTTTTCCTGCTGGCCCTCTCCCCACTATTACCCTATTGTCCTGCCCACATCCCCCTCTCCGAGATGGT
AGAGATAATGATCAATAAATACTGAGGGAACTCAGAGACCGGTGCGGCGCGGGTCCTCCATATGCTGAGCGCCGGTCCCCTGGGCCCACTTTTCTTT
CTCTATACTTTGTCTCTGTTGTCTTTCTTTTCTCAAGTCTCTCGTTCCACCTGAGGAGAAATGCCCACAGCTGTGGAGGCGCAGGCCACTCCATCTG
GTGCCCAACGTGGATGCTTTTCTCTAGGGTGAAGGGACTCTCGAGTGTGGTCATTGAGGACAAGTCAACGAGAGATTCCCGAGTACGTCTACAGTGA
GCCTTGTGGTAAGCTTGGGCGCTCGGAAGAAGCCAGGGTTAATGGGGCAAACTAAAAGTAAAGTCTCTCATTCCACCTGATGAGAAACACCCAGAGG
TGTGGAGGGGCAGGCCACCCCTTCAGGGTAGGGTCCCCTCCATGCAGACCATAGAGCACAGGTGTGCCCCAAAGAGGAGCAGAGAGAAGGAGGGAGA
GGGCCCACGAGAGACTTGGAAATGAATGGCAGGATTTTAGGCGCTGGACTTGGGTTCGGGGCACCTGGCCTTTCCTTGTGTATTTCTCCTACTGTCT
GCCTAACTATTTAATACAATAAAAGAAAACCAGCCCCTGGTTCTTGTGGTGTTTCCACCCTCCCGGGTCCCCGCTGGCTGCCTGGCTTCCTCCCGCA
GCTCCTGCTGTGTGTGTATGTGTGTGTGTGCACATCTGTGGGGCGTATGTGTGTTCGTCTTTGTAATTGAGGCTGCAGAGTGGAGAGAGCAGGGG
TTTTCTCTGGGGACCCAGAGAGAAGGAGGCGTTTTCACCCACAGCCGAACAGGGCAGGACCCCAGCACCCGGGACCCAGCGGGACTTTGCCAAGGGGA
TGGACCTGGCTGGGCCACGCGGCTGTTTGTGTAGGGAAAAGAAAGAGAGATCACACTGTTACTGTGTCTATGTAGAAAAGGAAGACATAAACTCCAT
TTTGAGCTGTACTAAGAAAAATTATTTTGCCTTGACCTGCTGTTAACCTGTAACTGTAGCCCCAACCCTGTGCTCAAAGAAACATGTGCTGTATGGA
ATCAAGGTTTAAGGGATCAAGGGCTGTACAGGATGTGCCTTGTTAACAATGTGTTTACAGGCAGTATGCTTGGTAAAAGTCATCGCCATTCTCCATT
CTCCATTAATCAGGGGCACGATGCACTGCGGAAAGCCACAGGGACCTCTGCCCGAGAAAGCCTGGGTATTGTCCAAGGCTTCCCCCCACTGAGACAG
CCTGAGATACGGCCTCGTGGGAAGGGAAAGACCTGACCGTCCCCCAGCCCGACACCCGTAAAGGGTCTGTGCTGAGGAGGATTAGTAAAAGGGGAAG
GCCTCTTGCAGTTGAGATAAGAGGAAGGCCTCCGTCTCCTGCATGTCCTTGGGAATGGAATGTCTTGGTGTAAAACCCGATAGTACATTCCTTCTAT
TCTGAGAGAAGAAAACCACCCTGTGGCTGGAGGTGAGATATGCTAGCGGCAATGCTGCTCTGTTACTCTTTGCTACACTGAGATGTTTGGGTGGAGA
GAAGCATAAATCTGGCCTATGTGCACATCTGGGCACAGAACCTCCCCTTGAACTTGTGACACAGATTCCTTTGTTCACATGTTTTCCTGCTGACCTT
CTCCCCACTATCGCCCTGTTCTCCCACCGCATTCCCCTTGCTGAGATAGTGAAAATAGTAATCTGTAGATACCAAGGGAACTCAGAGACCATGGCCG
GTGCACATCCTCCGTACGCTGAGCGCTGGTCCCCTGGGCCCATTGTTCTTTCTCTATACTTTGTCTCTGTGTCTTATTTCTTTCCTCAGTCTCTCAT
CCCTCCTGACGAGAAATACCCACAGGTGTGGAGGGGCTGGCCCCCTTCATCTGATGCCCAATGTGGGTGCCTTTCTCTAGGGTGAAGGTACTCTACA
GTGTGGTCATTGAGGACAAGTTGACGAGAGAGTCCCAAGTACGTCCACGGTCAGCCTTGCGGTAAGCTTGTGTGCTTAGAGGAACCCAGGGTAACGA
TGGGCAAACTGAAAGTAAATATGCCTCTTATCTCAGCTTTATTAAAATTCTTTTAAGAAGAGGGGGAGTTAGAGCTTCTACAGAAAATCTAATTAC
GCTATTTCAAACAATAGAACAATTCTGCCCATGGTTTCCAGAACAGGGAACTTTAGATCTAAAAGATTGGGAAAAAATTGGCAAAGAATTAAAACAA
GCAAATAGGGAAGGTAAAATCATCCCACTTACAGTATGGAATGATTGGGCCATTATTAAAGCAACTTTAGAACCATTTCAAACAGGAGAAGATATTG
TTTCAGTTTCTGATGCCCCTAAAAAGCTGTGTAACAGATTGTGAAGAAGAGGCAGGGACAGAATCCCAGCAGGAACGGAAAGTTCACATTGTAAATA
TGTAGCAGAGTCTGTAATGGCTCAGTCAACGCAAAATGTTGACTACAGTCAATTACAGGAGATAATATACCCTGAATCATCAAAATTGGGGGAAGGA
GGTCCAGAATCATTGGGGCCATCAGAGCCTAAACCACGATCGCCATCAACTCCTCCTCCCGTGGTTCAGATGCCTGTAACATTACAACCTCAAACGC
AGGTTAGACAAGCACAAACCCCAAGAGAAATCAAGTAGAAAGGGACAGAGTCTCTATCCCGGCAATGCCAACTCAGATACAGTATCCACAATATCA
GCCGGTAGAAAATAAGACCCAACCGCTGGTAGTTTATCAATACCGGCTGCCAACCGAGCTTCAGTATCGGCCTCCTTCAGAGGTTCAATACAGACCT
CAAGCGGTGTGTCCTGTGCCAAATAGCACGGCACCATACCAGCAACCCACAGCGATGGCGTCTAATTCACCAGCAACACAGGACGCGGCGCTGTATC
CTCAGCCGCCCACTGTGAGACTTAATCCTACAGCATCACGTAGTGGACAGGGTGGTGCACTGCATGCAGTCATTGATGAAGCCAGAAAACAGGGCGA

TCTTGAGGCATGGCGGTTCCTGGTAATTTTACAACTGGTACAGGCCGGGGAAGAGACTCAAGTAGGAGCGCCTGCCCGAGCTGAGACTAGATGTGAA
CCTTTCACCATGAAAATGTTAAAAGATATAAAGGAAGGAGTTAAACAATATGGATCCAACTCCCCTTATATAAGAACATTATTAGATTCCATTGCTC
ATGGAAATAGACTTACTCCTTATGACTGGGAAATTTTGGCCAAATCTTCCCTTTCATCCTCTCAGTATCTACAGTTTAAAACCTGGTGGATTGATGG
AGTACAAGAACAGGTACGAAAAAATCAGGCTACTAAGCCCACTGTTAATATAGACGCAGACCAATTGTTAGGAACAGGTCCAAATTGGAGCACCATT
AACCAACAATCAGTGATGCAGAATGAGGCTATTGAACAAGTAAGGGCTATTTGCCTCAGGGCCTGGGGAAAAATTCAGGACCCAGGAACAGCTTTCC
CTATTAATTCAATTAGACAAGGCTCTAAAGAGCCATATCCTGACTTTGTGGCAAGATTACAAGATGCTGCTCAAAAGTCTATTACAGATGACAATGC
CCGAAAAGTTATTGTAGAATTAATGGCCTATGAAAATGCAAATCCAGAATGTCAGTCGGCCATAAAGCCATTAAAAGGAAAAGTTCCAGCAGGAGTT
GATGTAATTACAGAATATGTGAAGGCTTGTGATGGGATTGGAGGAGCTATGCATAAGGCAATGCTAATGGCTCAAGCAATGAGGGGGCTCACTCTAG
GAGGACAAGTTAGAACATTTGGGAAAAAATGTTATAATTGTGGTCAAATCGGTCATCTGAAAGGAGTTGCCCAGGCTTAAATAAACAGAATATAAT
AAATCAAGCTATTACAGCAAAAAATAAAAAGCCATCTGGCCTGTGTCCAAAATGTGGAAAAGCAAAACATTGGGCCAATCAATGTCATTCTAAATTT
GATAAAGATGGGCAACCATTGTCTGGAAACAGGAAGAGGGGCCAGCCTCAGGCCCCCCAACAAACTGGGGCATTCCCAGTTAAACTGTTTGTTCCTC
AGGGTTTTCAAGGACAACAACCCCTACAGAAAATACCACCACTTCAGGGAGTCAGCCAATTACAACAATCCAACAGCTGTCCCGCGCCACAGCAGGC
AGCACCGCAGTAGATTTATGTTCCACCCAAATGGTCTTTTTACTCCCTGGAAAGCCCCCACAAAAGATTCCTAGAGGGGTATATGGCCCGCTGCCAG
AAGGGAGGGTAGGCCTTTGAGGGAGATCAAGTCTAAATTTGAAGGGAGTCCAAATTCATACTGGGGTAATTTATTCAGATTATAAAGGGGGAATTCA
GTTAGTGATCAGCTCCACTGTTCCCCGGAGTGCCAATCCAGGTGATAGAATTGCTCAATTACTGCTTTTGCCTTATGTTAAAATTGGGGAAAACAAA
AAGGAAAGAACAGGAGGGTTTGGAAGTACCAACCCTGCAGGAAAAGCTGCTTATTGGGCTAATCAGGTCTCAGAGGATAGACCCGTGTGTACAGTCA
CTATTCAGGGAAAGAGTTTGAAGGATTAGTGGATACCCAGGCTGATGTTTCTGTCATCGGCATAGGTACTGCCTCAGAAGTGTATCAAAGTGCCATG
ATTTTACATTGTCCAGGATCTGATAATCAAGAAAGTACGGTTCAGCCTGTGATCACTTCATTCCAATCAATTTATGGGGCCGAGACTTGTTACAACA
ATGGCATGCAGAGATTACTATCCCAGCCTCCCTATACAGCCCCAGGAATAAAAAAATCATGACTAAAATGGGATAGCTCCCTAAAAAGGGACTAGGA
AAGAAGTCCCAATTGAGGCTGAAAAAAATCAAAAAGAAAAGGAATAGGGCATCCTTTTTAGGAGCGGTCACTGTAGAGCCTCCAAAACCCATTCCA
TTAACTTGGGGGAAAAAAAAACAACTGTATGGTAAATCAGCAGCGCTTCCAAAACAAAAACTGGAGGCTTTACATTTATTAGCAAAGAAACAATTAG
AAAAAGGACATTGAGCCTTCATTTTCGCCTTGGAATTCTGTTTGTAATTCAGAAAAAATCCGGCAGATGGCGTATAATGCCGTAATTCAACCCATGG
GGGCTCTCCCACCCCGGTTGCCCTCTCCAGCCATGGTCCCCTTTAATTATAATTGATCTGAAGGATTGCTTTTTTACCATTCCTCTGGCAAAACAGG
ATTTTGAAAAATTTGCTTTTACCACACCAGCCTAAATAATAAAGAACCAGCCACCAGGTTTCAGTGGAAAGTATTGCCTCAGGGAATGCTTAATAGT
TCAACTATTTGTCAGCTCAAGCTCTGCAACCAGTTAGAGACAAGTTTTCAGACTGTTACATCGTTCACTATGTTGATATTTTGTGTGCTGCAGAAAC
GAGAGACAAATTAATTGACCGTTACACATTTCTGCAGACAGAGGTTGCCAACGCGGGACTGACAATAACATCTGATAAGATTCAAACCTCTACTCCT
TTCCGTTACTTGGGAATGCAGGTAGAGGAAAGGAAAATTAAACCACAAAAAATAGAAATAAGAAAAGCACATTAAAAGCATTAAATGAGTTTCAAA
AGTTGCTAGGAGATACTAATTGGATTTGGAGATATTAATTGGATTTGGCCAACTCTAGGCATTCCTACTTATGCCATGTCAAATTTGTTCTCTTTCT
TAAGAGGGGACTCGGAATTAAATAGTGAAAGAACGTTAACTCCAGAGGCAACTAAAGAAATTAAATTAATTGAAGAAAAAATTCGGTCAGCACAAGT
AAATAGAATAGATCACTTGGCCCCACTCCAAATTTTGATTTTTGCTACTGCACATTCCCTAACAGGCATCATTGTTCAAAATACAGATCTTGTGGAG
TGGTCCTTCCTTCCTCACAGTACAATTAAGACTTTTACATTGTACTTGGATCAAATGGCTACATTAATTGGTCAGGGAAGATTATGAATAATAACAT
TGTGTGGAAATGACCCAGATAAAATCACTGTTCCTTTCAACAAGCAACAGGTTAGACAAGCCTTTATCAATTCTGGTGCATGGCAGATTGGTCTTGC
CGATTTTGTGGGAATTATTGACAATCGTTACCCCAAAACAAAAATCTTCCAGTTTTTAAAATTGACTACTTGGATTTTACCTAAAGTTACCAAACAT
AAGCCTTTAAAAAATGCTCTGGCAGTGTTTACTGATGGTTCCAGCAATGGAAAAGTGGCTTACACCGGGCCAAAAGAATGAGTCATCAAAACTCAGT
ATCACTTGACTCAAAGAGCAGAGTTGGTTGCCGTCATTACAGTGTTAACAAGATTTTAATCAGTCTATTAACATTGTATCAGATTCTGCATATGTAG
TACAGGCTACAAAGGATATTGAGAGAGCCCTAATCAAATACATTATGGATGATCAGTTAAACCCGCTGTTTAATTTGTTACAACAAAATGTAAGAAA
AAGAAATTTCCCATTTTATATTACTCATATTCGAGCACACACTAATTTACCAGGGCCTTTAACTAAAGCAAATGAACAAGCTGACTTGCTAGTATCA
TCTGCATTCATGGAAGCACAAGAACTTCATGCCTTGACTCATGTAAATGCAATAGGATTAAAAAATAAATTTGATATCACATGGAAACAGACAAAAA
ATATTGTACAACATTGCACCCAGTGTCAGATTCTACACCTGGCCACTCAGGAGGCAAGAGTTAATCCCAGAGGTCTATGTCCTAATGTGTTATGGCA
AATGGATGTCATGCACGTACCTTCATTTGGAAAATTGTCATTTGTCCATGTGACAGTTGATACTTATTCACATTTCATATGGGCAACCTGCCAGACA
GGAGAAAGTACTTCCCATGTTAAAAGACATTTATTATCTTGTTTTCCTGTCATGGGAGTTCCAGAAAAAGTTAAAACAGACAATGGGCCAGGTTACT
GTAGTAAAGCAGTTCAAAAATTCTTAAATCAGTGGAAAATTACACATACAATAGGAATTCTCTATAATTCCCAAGGACAGGCCATAATTGAAAGAAC
TAATAGAACACTCAAAGCTCAATTGGTTAAACAAAAAAAAGGAAAAGACAGGAGTATAACACTCCCCAGATGCAACTTAATCTAGCACTCTATACTT
TAAATGTTTTAAACATTTATAGAAATCAGACCACTACCTCTGCAGAACAACATCTTACTGGTAAAAGGAACAGCCCACATGAAGGAAAACTGATTTG
GTGGAAAGATAATAAAAATAAAACATGGGAAATGGGGAAGGTGATAACGTGGGGGAGAGGTTTTGCTTGTGTTTCACCAGGAGAAAATCAGCTTCCT
GTTTGGATACCCACTAGACATTTAAAGTTCTACAATGAACTCACTGGAGATGCAAAGAAAAGTGTGGAGATGGAGACACCCCAATCGACTCGCCAGG
TAAACAAAATGGTGATATCAGAAGAACAGAAAAAGTTGCCTTCCATCAAGGAAGCAGAGTTGCCAATATAGGCACAATTAAAGAAGCTGACACAGTT
AGCTAAAAAAAAAAGCCTAGAGAATACAAAGGTGACACCAACTCCAGAGAATATGCTGCTTGCAGCTCTGATGATTGTATCAACGGTGGTAAGTCTT
CCCAAGTCTGCAGGAGCAGCTGCAGCTAATTATACTTACTGGGCCTATGTGCCTTTCCCACCCTTAATTCGGGCAGTTACATAGATGGATAATCCTA
TTGAAGTAGATGTTAATAATAGTGCATGGGTGCCTGGCCCCACAGATGACTGTTGCCCTGCCCAACCTGAAGAAGGAATGATGATGAATATTTCCAT
TGGGTATCCTTATCCTCCTGTTTGCCTAGGGAAGGCACCAGGATGCTTAATGCCTACAACCCAAAATTGGTTGGTAGAAGTACCTACAGTCAGTGCT
ACCAGTAGATTTACTTATCACATGGTAAGTGGAATGTCACAGATAAATAATTTACAGGACCCTTCTTATCAAAGATCATTACAATGTAGGCCTAAGG
GGAAGGCTTGCCCCAAGGAAATTCCCAAAGAATCAAAAAGCCCAGAGTCTTAGTCTGCGGAGAATGTGTGGCTGATACTGCAGTGTAGTACAAAAC
AATGAATTTTGAACTATGATAGACTGGGTCCCTTGAGGCCAATTATATCATAACTGTACAGGCCAGACTCATTCATGTTCACAGGCCCCATCCATCT
GGCCCATTAATCCAGCCTATGACGGTGATGTAACTGAAAGGCTGGACCAGGTTTATAGAAGGTTAGAATCACTCTGTCCAAGGAAATGGGGTGAAAA
GGGAATTTCATCACCTTGACCAAAGTTAGTCCTGTTACTGGTCCTGAACATCCAGAATTAGGAAGCTTACTGTGGCCTCACACCACATTAGAATTTG
TTCTGGAAATCAAGCTATAGGAACAAGAGATCGTAAGTCATATTATACTATCAACCTAAATTCCAGTCTGACAATTCCTTTGCAAAATTGTGTAAAA
CTCCCTTATATTGCTAGTTGTAGGAAAAACATAGTTATTAAACCTGATTCCCAAACCATAATCTGTGAAAATTGTGGAATGTTTACTTGCATTGATT

TGACTTTTAATTGGCAGCACCGTATTCTACTAGGAAGAGCAAGAGAGGGTGTGTGGATCCTTGTGTCCATGGACCGACCATGGGAGGCTTCGCTATC
CATCCATATTTTAACGGAAGTATTAAAAGGAATTCTAACTAGATCCAAAAGATTCATTTTTACTTTGATGGCAGTGATTATGGGCCTCATTGCAGTC
ACAGCTACTGCTGCGGCTGCTGGAATTGCTTTACACTCCTCTGTTCAAACTGCAGAATACGTAAATGATTGGCAAAAGAATTCCTCAAAATTGTGGA
ATTCTCAGATCCAAATAGATCAAAAATTGGCAAACCAAATTAATGATCTTAGACAAACTGTCATTTGGATGGGAGAGGCTCATGAGCTTGGAATATC
TTTTTCAGTTACGATGTGACTGGAATACATCAGATTTTTGTGTTACACCACAAGCCTATAATGAGTCTGAGCATCACTGGGACATGGTTAGATGCCA
TCTGCAAGGAGGAGAAGATAATCTTACTTTAGACATTTCAAAATTAAAAGAATTTTTTTTTTCTTTGAGACAGAGTCTCGCTCTGTCGCCCAGGCTG
GAGTGCAGTGGCGTGATCTCAGCTCACTGCAAGTTCCGCCTCCTGGGTTTACACCATTCTCCTGCCTCAGCCTCCCAAGTAGTTGGGACTACAGGAG
CCCACCACCATGCCTGGCTAATTTTTTTTGGGTTTTTAATAGAGATGGAGTTTCACCGTGTTAGCCAGGATGGTCTCGATCTCCTGACCTTGTGATC
TGCCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGTCGTGAGCCACCGTGCCCAGCCAAGAAAAAATTTTTGAGGCATCAAAAGCCCATTTAAATT
TGGTGCCAGGAACGGAGACAATCGTGAAAGCTGCTGATAGCCTCACAAATCTTAAGCCAGTCACTTGGGTTAAAAGCATCAGAAGTTTCACTATTGT
AAATTTCATATTAATCCTTGTATGCCTGTTCTGTCTGTTGTTAGTCTACAGGTGTATCCAGCAGCTCCAAAGAGACAGCAACCAGCAAGAATGGGCC
ATAGTGACGATGGTGGTTTTGTCAAAAAGAAAAGGGGGGGATATGTAAGGAAAAGAGAGATCAGACTTTCACTGTGTCTATGTAGAAAAGGAAGACA
TAAGAAACTCCATTTTGATCTGTACTAAGAAAAATTGTTTTGCCTTGAGATGCTGTTAATCTGTAACTTTAGCCCCAACCCTGTGCTCACGGAAACA
TGTGCTGTAAGGTTTAAGGGATCTAGGGCTGTGCAGGATGTACCTTGTTAACAATATGTTTGCAGGCAGTATGTTTGGTAAAGTCATCGCCATTCT
CCATTCTCGATTAACCAGGGGCTCAATGCACTGTGGAAAGCCACAGGAACCTCTGCCCAAGAAAGCCTGGCTGTTGTGGGAAGTCAGGGACCCCGAA
TGGAGGGACCAGCTGGTGCTGCATCAGGAAACATAAATTGTGAAGATTTCTTGGACATTTATCAGTTTCCAAAATTAATACTTTTATAATTTCTTAC
ACCTGTCTTACTTTAATCTCTTAATCCTGTTATCTTTGTAAGCTGAGGATATACGTCACCTCAGGACCACTATTGTACAAATTGATTGTAAAACATG
TTCACATGTGTTTGAACAATATGAAATCAGTGCACCTTGAAAATGAACAGAATAACAGTGATTTTAGGGAACAAAGGAAGACAACCATAAGGTCTGA
CTGCCTGAGGGGTCGGGCAAAAAGCCATATTTTTCTTCTTGCAGAGAGCCTATAAATGGACGTGCAAGTAGGAGAGATATTGCTAAATTCTTTTCCT
AGCAAGGAATATAATACTAAGACCCTAGGGAAAGAATTGCATTCCTGGGGGGGAGGTCTATAAACGGCCGCTCTGGGAGTGTCTGTCCTATGTGGTTG
AGATAAGGACTGAGATACGCCCTGGTCTCCTGCAGTACCCTCAGGCTTACTAGGATTGGGAAACCCCAGTCCTGGTAAATTTGAGGTCAGGCCGGTT
CTTTGCTCTGAACCCTGTTTTCTGTTAAGATGTTTATCAAGACAATACATGCACCGCTGAACATAGACCCTTATCAGGAGTTTCTGATTTTGCTCTG
GTCCTGTTTCTTCAGAAGCATGTCATCTTTGCTCTGCCTTCTGCCCTTTGAAGCATGTGATCTTTGTGACCTACTCCCTGTTCATACACCCCTCCCC
TTTTAAAATCCCTAATAAAAACTTGCTGGTTTTGTGGCTCAGGGGGGCATCATGGACCTACCAATACGTGATGTCACCCCCGGTGGCCCAGCTGTAA
AATTCCTTTCTTTATACTCTTATTTCTCAGACCAGCTGACACTTAGGGAAAATAGAAAGAACCTATGTTGAAATATTGGAGGCGGGTTCCCCCGATA
CCTGGGTATTGTCCAAGGTTTCCTTTGCTGAGGAGGATTAGTAAAAGGAATGCCTCCATCTCCTGCATGTCCCTGGGAACAGAATGTTCCCACCAAC
CACCCTGTGGCTGGAGGCGGGATATGCTGGCAGCAATGCTGCTCTATTACTCTTTGCTACACTGAGATGTTTGGGTGGAGAGAAGCATAAATCTGGC
CTATGTGCACATCTGGGCACAGCACCTTCCTTTGAACTTATTTGTGACACAGATTCCTTTGCTCACGTTTTCCTGTTGACTTTCTCACCACTCACCC
TATTCTCCTGTGGCATTCGCCTTGCGGAGATAGTGAAAATAGTAATAAATACTGAGGGAACTCAGACTGAGGGAACTCAGACTGGGCAGACCGGGGC
CAGTGTGGGTCCTCCATATGCTGAGCGCCGGTTCCCTGGGCCCACTGTTCTTTCTCTATACTTTGTCTCTGTGCCTTATTTTCTCAGTCTCTCATTC
CACCTGATGAGAAATACCCACAGGTGTGGAGGGGCTGGCCCCCTTCA

SEQ ID 76

ATGGGGCAAACTGAAAGTAAATATGCCTCTTATCTCAGCTTTATTAAAATTCTTTTAAGAAGAGGGGGAGTTAGAGCTTCTACAGAAAATCTAATTA
CGCTATTTCAAACAATAGAACAATTCTGCCCATGGTTTCCAGAACAGGGAACTTTAGATCTAAAAGATTGGGAAAAAATTGGCAAAGAATTAAAACA
AGCAAATAGGGAAGGTAAAATCATCCCACTTACAGTATGGAATGATTGGGCCATTATTAAAGCAACTTTAGAACCATTTCAAACAGGAGAAGATATT
GTTTCAGTTTCTGATGCCCCTAAAAGCTGTGTAACAGATTGTGAAGAAGAGGCAGGGACAGAATCCCAGCAAGGAACGGAAAGTTCACATTGTAAAT
ATGTAGCAGAGTCTGTAATGGCTCAGTCAACGCAAAATGTTGACTACAGTCAATTACAGGAGATAATATACCCTGAATCATCAAAATTGGGGGAAGG
AGGTCCAGAATCATTGGGGGCCATCAGAGCCTAAACCACGATCGCCATCAACTCCTCCTCCCGTGGTTCAGATGCCTGTAACATTACAACCTCAAACG
CAGGTTAGACAAGCACAAACCCCAAGAGAAAATCAAGTAGAAAGGGACAGAGTCTCTATCCCGGCAATGCCAACTCAGATACAGTATCCACAATATC
AGCCGGTAGAAAATAAGACCCAACCGCTGGTAGTTTATCAATACCGGCTGCCAACCGAGCTTCAGTATCGGCCTCCTTCAGAGGTTCAATACAGACC
TCAAGCGGTGTGTCCTGTGCCAAATAGCACGGCACCATACCAGCAACCCACAGCGATGGCGTCTAATTCACCAGCAACACAGGACGCGGCGCTGTAT
CCTCAGCCGCCCACTGTGAGACTTAATCCTACAGCATCACGTAGTGGACAGGGTGGTGCACTGCATGCAGTCATTGATGAAGCCAGAAAACAGGGCG
ATCTTGAGGCATGGCGGTTCCTGGTAATTTTACAACTGGTACAGGCCGGGGAAGAGACTCAAGTAGGAGCGCCTGCCCGAGCTGAGACTAGATGTGA
ACCTTTCACCATGAAAATGTTAAAAGATATAAAGGAAGGAGTTAAACAATATGGATCCAACTCCCCTTATATAAGAACATTATTAGATTCCATTGCT
CATGGAAATAGACTTACTCCTTATGACTGGGAAATTTTGGCCAAATCTTCCCTTTCATCCTCTCAGTATCTACAGTTTAAAACCTGGTGGATTGATG
GAGTACAAGAACAGGTACGAAAAAATCAGGCTACTAAGCCCACTGTTAATATAGACGCAGACCAATTGTTAGGAACAGGTCCAAATTGGAGCACCAT
TAACCAACAATCAGTGATGCAGAATGAGGCTATTGAACAAGTAAGGGCTATTTGCCTCAGGGCCTGGGGAAAAATTCAGGACCCAGGAACAGCTTTC
CCTATTAATTCAATTAGACAAGGCTCTAAAGAGCCATATCCTGACTTTGTGGCAAGATTACAAGATGCTGCTCAAAAGTCTATTACAGATGACAATG
CCCGAAAAGTTATTGTAGAATTAATGGCCTATGAAAATGCAAATCCAGAATGTCAGTCGGCCATAAAGCCATTAAAAGGAAAAGTTCCAGCAGGAGT
TGATGTAATTACAGAATATGTGAAGGCTTGTGATGGGATTGGAGGAGCTATGCATAAGGCAATGCTAATGGCTCAAGCAATGAGGGGGCTCACTCTA
GGAGGACAAGTTAGAACATTTGGGAAAAAATGTTATAATTGTGGTCAAATCGGTCATCTGAAAAGGAGTTGCCCAGTCTTAAATAAACAGAATATAA
TAAATCAAGCTATTACAGCAAAAAATAAAAAGCCATCTGGCCTGTGTCCAAAATGTGGAAAAGGAAAACATTGGGCCAATCAATGTCATTCTAAATT
TGATAAGGATGGGCAACCATTGTCGGGAAACAGGAAGAGGGGCCAGCCTCAGGCCCCCCAACAAACTGGGGCATTCCCAGTTCAACTGTTTGTTCCT
CAGGGTTTTCAAGGACAACAACCCCTACAGAAAATACCACCACTTCAGGGAGTCAGCCAATTACAACAATCCAACAGCTGTCCCGCGCCACAGCAGG
CAGCACCGCAGTAA

SEQ ID 77

ATGGGCCAGACCGAGAGCAAGTACGCCAGCTACCTGAGCTTCATCAAGATCCTGCTGCGCCGCGGCGGCGTGCGCGCCAGCACCGAGAACCTGATCA
CCCTGTTCCAGACCATCGAGCAGTTCTGCCCCTGGTTCCCCGAGCAGGGCACCCTGGACCTGAAGGACTGGGAGAAGATCGGCAAGGAGCTGAAGCA
GGCCAACCGCGAGGGCAAGATCATCCCCCTGACCGTGTGGAACGACTGGGCCATCATCAAGGCCACCCTGGAGCCCTTCCAGACCGGCGAGGACATC
GTGAGCGTGAGCGACGCCCCCAAGAGCTGCGTGACCGACTGCGAGGAGGAGGCCGGCACCGAGAGCCAGCAGGGCACCGAGAGCAGCCACTGCAAGT
ACGTGGCCGAGAGCGTGATGGCCCAGAGCACCCAGAACGTGGACTACAGCCAGCTGCAGGAGATCATCTACCCCGAGAGCAGCAAGCTGGGCGAGGG
CGGCCCCGAGAGCCTGGGCCCCAGCGAGCCCAAGCCCCGCAGCCCCAGCACCCCCCCCCCCGTGGTGCAGATGCCCGTGACCCTGCAGCCCCAGACC
CAGGTGCGCCAGGCCCAGACCCCCCGCGAGAACCAGGTGGAGCGCGACCGCGTGAGCATCCCCGCCATGCCCACCCAGATCCAGTACCCCCAGTACC
AGCCCGTGGAGAACAAGACCCAGCCCCTGGTGGTGTACCAGTACCGCCTGCCCACCGAGCTGCAGTACCGCCCCCCCAGCGAGGTGCAGTACCGCCC
CCAGGCCGTGTGCCCCGTGCCCAACAGCACCGCCCCCTACCAGCAGCCCACCGCCATGGCCAGCAACAGCCCCGCCACCCAGGACGCCGCCCTGTAC
CCCCAGCCCCCCACCGTGCGCCTGAACCCCACCGCCAGCCGCAGCGGCCAGGGCGGCGCCCTGCACGCCGTGATCGACGAGGCCCGCAAGCAGGGCG
ACCTGGAGGCCTGGCGCTTCCTGGTGATCCTGCAGCTGGTGCAGGCCGGCGAGGAGACCCAGGTGGGCGCCCCCGCCCGCGCCGAGACCCGCTGCGA
GCCCTTCACCATGAAGATGCTGAAGGACATCAAGGAGGGCGTGAAGCAGTACGGCAGCAACAGCCCCTACATCCGCACCCTGCTGGACAGCATCGCC
CACGGCAACCGCCTGACCCCCTACGACTGGGAGATCCTGGCCAAGAGCAGCCTGAGCAGCAGCCAGTACCTGCAGTTCAAGACCTGGTGGATCGACG
GCGTGCAGGAGCAGGTGCGCAAGAACCAGGCCACCAAGCCCACCGTGAACATCGACGCCGACCAGCTGCTGGGCACCGGCCCCAACTGGAGCACCAT
CAACCAGCAGAGCGTGATGCAGAACGAGGCCATCGAGCAGGTGCGCGCCATCTGCCTGCGCGCCTGGGGCAAGATCCAGGACCCCGGCACCGCCTTC
CCCATCAACAGCATCCGCCAGGGCAGCAAGGAGCCCTACCCCGACTTCGTGGCCCGCCTGCAGGACGCCGCCCAGAAGAGCATCACCGACGACAACG
CCCGCAAGGTGATCGTGGAGCTGATGGCCTACGAGAACGCCAACCCCGAGTGCCAGAGCGCCATCAAGCCCCTGAAGGGCAAGGTGCCCGCCGGCGT
GGACGTGATCACCGAGTACGTGAAGGCCTGCGACGGCATCGGCGGCGCCATGCACAAGGCCATGCTGATGGCCCAGGCCATGCGCGGCCTGACCCTG
GGCGGCCAGGTGCGCACCTTCGGCAAGAAGTGCTACAACTGCGGCCAGATCGGCCACCTGAAGCGCAGCTGCCCCGTGCTGAACAAGCAGAACATCA
TCAACCAGGCCATCACCGCCAAGAACAAGAAGCCCAGCGGCCTGTGCCCCAAGTGCGGCAAGGGCAAGCACTGGGCCAACCAGTGCCACAGCAAGTT
CGACAAGGACGGCCAGCCCCTGAGCGGCAACCGCAAGCGCGGCCAGCCCCAGGCCCCCCAGCAGACCGGCGCCTTCCCCGTGCAGCTGTTCGTGCCC
CAGGGCTTCCAGGGCCAGCAGCCCCTGCAGAAGATCCCCCCCCTGCAGGGCGTGAGCCAGCTGCAGCAGAGCAACAGCTGCCCCGCCCCCCAGCAGG
CCGCCCCCCAGGCTTAA

SEQ ID 78

MGQTESKYASYLSFIKILLRRGGVRASTENLITLFQTIEQFCPWFPEQGTLDLKDWEKIGKELKQANREGKIIPLTVWNDWAIIKATLEPFQTGEDI
VSVSDAPKSCVTDCEEEAGTESQQGTESSHCKYVAESVMAQSTQNVDYSQLQEIIYPESSKLGEGGPESLGPSEPKPRSPSTPPPVVQMPVTLQPQT
QVRQAQTPRENQVERDRVSIPAMPTQIQYPQYQPVENKTQPLVVYQYRLPTELQYRPPSEVQYRPQAVCPVPNSTAPYQQPTAMASNSPATQDAALY
PQPPTVRLNPTASRSGQGGALHAVIDEARKQGDLEAWRFLVILQLVQAGEETQVGAPARAETRCEPFTMKMLKDIKEGVKQYGSNSPYIRTLLDSIA
HGNRLTPYDWEILAKSSLSSSQYLQFKTWWIDGVQEQVRKNQATKPTVNIDADQLLGTGPNWSTINQQSVMQNEAIEQVRAICLRAWGKIQDPGTAF
PINSIRQGSKEPYPDFVARLQDAAQKSITDDNARKVIVELMAYENANPECQSAIKPLKGKVPAGVDVITEYVKACDGIGGAMHKAMLMAQAMRGLTL
GGQVRTFGKKCYNCGQIGHLKRSCPVLNKQNIINQAITAKNKKPSGLCPKCGKGKHWANQCHSKFDKDGQPLSGNRKRGQPQAPQQTGAFPVQLFVP
QGFQGQQPLQKIPPLQGVSQLQQSNSCPAPQQAAPQ

SEQ ID 79

MGQTESKYASYLSFIKILLRRGGVRASTENLITLFQTIEQFCPWFPEQGTLDLKDWEKIGKELKQANREGKIIPLTVWNDWAIIKATLEPFQTGEDI
VSVSDAPKSCVTDCEEEAGTESQQGTESSHCKYVAESVMAQSTQNVDYSQLQEIIYPESSKLGEGGPESLGPSEPKPRSPSTPPPVVQMPVTLQPQT
QVRQAQTPRENQVERDRVSIPAMPTQIQYPQYQPVENKTQPLVVYQYRLPTELQYRPPSEVQYRPQAVCPVPNSTAPYQQPTAMASNSPATQDAALY
PQPPTVRLNPTASRSGQGGALHAVIDEARKQGDLEAWRFLVILQLVQAGEETQVGAPARAETRCEPFTMKMLKDIKEGVKQYGSNSPYIRTLLDSIA
HGNRLTPYDWEILAKSSLSSSQYLQFKTWWIDGVQEQVRKNQATKPTVNIDADQLLGTGPNWSTINQQSVMQNEAIEQVRAICLRAWGKIQDPGTAF
PINSIRQGSKEPYPDFVARLQDAAQKSITDDNARKVIVELMAYENANPECQSAIKPLKGKVPAGVDVITEYVKACDGIGGAMHKAMLMAQAMRGLTL
GGQVRTFGKKCYNCGQIGHLKRSCPVLNKQNIINQAITAKNKKPSGLCPKCGKGKHWANQCHSKFDKDGQPLSGNRKRGQPQAPQQTGAFPVQLFVP
QGFQGQQPLQKIPPLQGVSQLQQSNSCPAPQQAAPQA

SEQ ID 80

GCCGCGGAATTTCGACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGA
CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATG
GCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCA
ATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGG
CCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT
TTTGGCAGTACACCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTTTTGGCACCA
AAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCT
CGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGCGGCCGGGAAC
GGTGCATTGGAACGCGGATTCCCCGTGCCAAGAGTGACGTAAGTACCGCCTATAGACTCTATAGGCACACCCCTTTGGCTCTTATGCATGCTATACT
GTTTTTGGCTTGGGGCCTATACACCCCGCTTCCTTATGCTATAGGTGATGGTATAGCTTAGCCTATAGGTGTGGGTTATTGACCATTATTGACCAC
TCCCCTATTGGTGACGATACTTTCCATTACTAATCCATAACATGGCTCTTTGCCACAACTATCTCTATTGGCTATATGCCAATACTCTGTCCTTCAG
AGACTGACACGGACTCTGTATTTTTACAGGATGGGGTCCCATTTATTATTTACAAATTCACATATACAACAACGCCGTCCCCGTGCCCGCAGTTTT
TATTAAACATAGCGTGGGATCTCCACGCGAATCTCGGGTACGTGTTCCGGACATGGGCTCTTCTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCT
GGTCCCATGCCTCCAGCGGCTCATGGTCGCTCGGCAGCTCCTTGCTCCTAACAGTGGAGGCCAGACTTAGGCACAGCACAATGCCCACCACCACCAG

TGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG
GCAGAAGAAGATGCAGGCAGCTGAGTTGTTGTATTCTGATAAGAGTCAGAGGTAACTCCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCT
GAGCAGTACTCGTTGCTGCCGCGCGCGCCACCAGACATAATAGCTGACAGACTAACAGACTGTTCCTTTCCATGGGTCTTTTCTGCAGTCACCGTCg
tcgacgccaccatgggccagaccgagagcaagtacgccagctacctgagcttcatcaagatcctgctgcgccgcggcggcgtgcgcgccagcaccga
gaacctgatcaccctgttccagaccatcgagcagttctgcccctggttccccgagcagggcaccctggacctgaaggactgggagaagatcggcaag
gagctgaagcaggccaaccgcgagggcaagatcatccccctgaccgtgtggaacgactgggccatcatcaaggccaccctggagcccttccagaccg
gcgaggacatcgtgagcgtgagcgacgcccccaagagctgcgtgaccgactgcgaggaggaggccggcaccgagagccagcagggcaccgagagcag
ccactgcaagtacgtggccgagagcgtgatggcccagagcacccagaacgtggactacagccagctgcaggagatcatctaccccgagagcagcaag
ctgggcgagggcggcccccgagagcctgggccccagcgagcccaagccccgcagccccagcacccccccccccgtggtgcagatgcccgtgaccctgc
agccccagacccaggtgcgccaggcccagacccccgcgagaaccaggtggagcgcgaccgcgtgagcatccccgccatgcccacccagatccagta
cccccagtaccagcccgtggagaacaagacccagcccctggtggtgtaccagtaccgcctgcccaccgagctgcagtaccgccccccccagcgaggtg
cagtaccgcccccaggccgtgtgccccgtgcccaacagcaccgcccccctaccagcagcccaccgccatggccagcaacagccccgccacccaggacg
ccgccctgtaccccagccccccaccgtgcgcctgaacccccaccgccagccgcagcggccagggcggcgccctgcacgccgtgatcgacgaggcccg
caagcagggcgacctggaggcctggcgcttcctggtgatcctgcagctggtgcaggccggcgaggagacccaggtgggcgcccccgcccgcgccgag
acccgctgcgagcccttcaccatgaagatgctgaaggacatcaaggagggcgtgaagcagtacggcagcaacagcccctacatccgcaccctgctgg
acagcatcgcccacgtgcaaccgcctgacccccctacgactgggagatcctggccaagagcagcctgagcagcagccagtacctgcagttcaagacctg
gtggatcgacggcgtgcaggagcaggtgcgcaagaaccaggccaccaagcccaccgtgaacatcgacgccgaccagctgctgggcaccggccccaac
tggagcaccatcaaccagcagagcgtgatgcagaacgaggccatcgagcaggtgcgcgccatctgcctgcgcgcctggggcaagatccaggacccccg
gcaccgccttccccatcaacagcatccgccagggcagcaaggagccctacccccgacttcgtggcccgcctgcaggacgccgcccagaagagcatcac
cgacgacaacgcccgcaaggtgatcgtggagctgatggcctacgagaacgccaacccccgagtgccagagcgccatcaagcccctgaagggcaaggtg
cccgccggcgtggacgtgatcaccgagtacgtgaaggcctgcgacggcatcggcggcgccatgcacaaggccatgctgatggcccaggccatgcgcg
gcctgacccctgggcggccaggtgcgcaccttcggcaagaagtgctacaactgcggccagatcggccacctgaagcgcagctgccccgtgctgaacaa
gcagaacatcatcaaccaggccatcaccgccaagaacaagaagcccagcggcctgtgccccaagtgcggcaagggcaagcactgggccaaccagtgc
cacagcaagttcgacaaggacggccagcccctgagcggcaaccgcaagcgcggccagccccaggccccccagcagaccggcgccttccccgtgcagc
tgttcgtgcccagggcttccagggccagcagcccctgcagaagatccccccccctgcagggcgtgagccagctgcagcagagcaacagctgccccgc
cccccagcaggccgcccccccaggcttaagaattcAGACTCGAGCAAGTCTAGAAAGCCATGGATATCGGATCCACTACGCGTTAGAGCTCGCTGATC
AGCCTCGACTGTGCCTTCTAGTTGCCAGCCATCTGTTGTTTGCCCCTCCCCGTGCCTTCCTTGACCCTGGAAGGTGCCACTCCCACTGTCCTTTCC
TAATAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGGTGGGGTGGGGCAGGACAGCAAGGGGGAGGATTGGGAAG
ACAATAGCAGGGGGTGGGCGAAGAACTCCAGCATGAGATCCCCGCGCTGGAGGATCATCCAGCCGGCGTCCCGGAAAACGATTCCGAAGCCCAACC
TTTCATAGAAGGCGGCGGTGGAATCGAAATCTCGTGATGGCAGGTTGGGCGTCGCTTGGTCGGTCATTTCGAACCCCAGAGTCCCGCTCAGAAGAAC
TCGTCAAGAAGGCGATAGAAGGCGATGCGCTGCGAATCGGGAGCGGCGATACCGTAAAGCACGAGGAAGCGGTCAGCCCATTCGCCGCCAAGCTCTT
CAGCAATATCACGGGTAGCCAACGCTATGTCCTGATAGCGGTCCGCCACACCCAGCCGGCCACAGTCGATGAATCCAGAAAAGCGGCCATTTTCCAC
CATGATATTCGGCAAGCAGGCATCGCCATGGGTCACGACGAGATCCTCGCCGTCGGGCATGCGCGCCTTGAGCCTGGCGAACAGTTCGGCTGGCGCG
AGCCCCTGATGCTCTTCGTCCAGATCATCCTGATCGACAAGACCGGCTTCCATCCGAGTACGTGCTCGCTCGATGCGATGTTTCGCTTGGTGGTCGA
ATGGGCAGGTAGCCGGATCAAGCGTATGCAGCCGCCGCATTGCATCAGCCATGATGGATACTTTCTCGGCAGGAGCAAGGTGAGATGACAGGAGATC
CTGCCCCGGCACTTCGCCCAATAGCAGCCAGTCCCTTCCCGCTTCAGTGACAACGTCGAGCACAGCTGCGCAAGGAACGCCCGTCGTGGCCAGCCAC
GATAGCCGCGCTGCCTCGTCCTGCAGTTCATTCAGGGCACCGGACAGGTCGGTCTTGACAAAAAGAACCGGGCGCCCCTGCGCTGACAGCCGGAACA
CGGCGGCATCAGAGCAGCCGATTGTCTGTTGTGCCCAGTCATAGCCGAATAGCCTCTCCACCCAAGCGGCCGGAGAACCTGCGTGCAATCCATCTTG
TTCAATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGATCTTGATCCCCTGCGCCATCAGATCCTTGGCGGCAAGAAAGCCATCCAGTTTACT
TTGCAGGGCTTCCCAACCTTACCAGAGGGCGCCCCAGCTGGCAATTCCGGTTCGCTTGCTGTCCATAAAACCGCCCAGTCTAGCTATCGCCATGTAA
GCCCACTGCAAGCTACCTGCTTTCTCTTTGCGCTTGCGTTTTCCCTTGTCCAGATAGCCCAGTAGCTGACATTCATCCGGGGTCAGCACCGTTTCTG
CGGACTGGCTTTCTACGTGTTCCGCTTCCTTTAGCAGCCCTTGCGCCCTGAGTGCTTGCGGCAGCGTGAAGCTAATTCATGGTTAAATTTTTTGTTAA
ATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGCCCGAGATAGGGTTGAGTGTTGTTCCAGTTTGGA
ACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTATCAGGGCGATGGCCGGATCAGCTTATGCGGTGTGAAATA
CCGCACAGATGCGTAAGGAGAAAATACCGCATCAGGCGCTCTTCCGCTTCCTCGCTCACTGACTCGCTGCGCTCGGTCGTTCGGCTGCGGCGAGCGG
TATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAA
CCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCG
ACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTC
TCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACC
CCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGT
AACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCT
GCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTTTGCAA
GCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACTGAACGGTGATCCCCACCGGAATTGCG

SEQ ID 81
ATGAACCCAAGCGAGATGCAAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGT
CAGAAGAACAGATGAAGTTGCCATCCACCAAGAAGGCAGAGACCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAAATATCTAGA
GAACACAAAGGTGACACAAACCCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCAGGAGCAGCT
GCAGCTAACTATACCTACTGGGCCTATGTGCCTTTCCCGCCCCTTAATTCGGGCAGTCACATGGATGGATAATCCTACAGAAGTATATGTTAATGATA

GTGTATGGGTACCTGGCCCCATAGATGATCGCTGCCCTGCCAAACCTGAGGAAGAAGGGATGATGATAAATATTTCCATTGGGTATCATTATCCTCC
TATTTGCCTAGGGAGAGCACCAGGATGTTTAATGCCTGCAGTCCAAAATTGGTTGGTAGAAGTACCTACTGTCAGTCCCATCTGTAGATTCACTTAT
CACATGGTAAGCGGGATGTCACTCAGGCCACGGGTAAATTATTTACAAGACTTTTCTTATCAAAGATCATTAAAATTTAGACCTAAAGGGAAACCTT
GCCCCAAGGAAATTCCCAAAGAATCAAAAAATACAGAAGTTTTAGTTTGGGAAGAATGTGTGGCCAATAGTGCGGTGATATTACAAAACAATGAATT
CGGAACTATTATAGATTGGGCACCTCGAGGTCAATTCTACCACAATTGCTCAGGACAAACTCAGTCGTGTCCAAGTGCACAAGTGAGTCCAGCTGTT
GATAGCGACTTAACAGAAAGTTTAGACAAACATAAGCATAAAAAATTGCAGTCTTTCTACCCTTGGGAATGGGGAGAAAAAGGAATCTCTACCCCAA
GACCAAAAATAGTAAGTCCTGTTTCTGGTCCTGAACATCCAGAATTATGGAGGCTTACTGTGGCTTCACACCACATTAGAATTTGGTCTGGAAATCA
AACTTTAGAAACAAGAGATCGTAAGCCATTTTATACTATTGACCTGAATTCCAGTCTAACAGTTCCTTTACAAAGTTGCGTAAAGCCCCCTTATATG
CTAGTTGTAGGAAATATAGTTATTAAACCAGACTCCCAGACTATAACCTGTGAAAATTGTAGATTGCTTACTTGCATTGATTCAACTTTTAATTGGC
AACACCGTATTCTGCTGGTGAGAGCAAGAGAGGGCGTGTGGATCCCTGTGTCCATGGACCGACCGTGGGAGGCCTCGCCATCCGTCCATATTTTGAC
TGAAGTATTAAAAGGTGTTTTAAATAGATCCAAAAGATTCATTTTTACTTTAATTGCAGTGATTATGGGATTAATTGCAGTCACAGCTACGGCTGCT
GTAGCAGGAGTTGCATTGCACTCTTCTGTTCAGTCAGTAAACTTTGTTAATGATTGGCAAAAAAAATTCTACAAGATTGTGGAATTCACAATCTAGTA
TTGATCAAAAATTGGCAAATCAAATTAATGATCTTAGACAAACTGTCATTTGGATGGGAGACAGACTCATGAGCTTAGAACATCGTTTCCAGTTACA
ATGTGACTGGAATACGTCAGATTTTTGTATTACACCCCAAATTTATAATGAGTCTGAGCATCACTGGGACATGGTTAGACGCCATCTACAGGGAAGA
GAAGATAATCTCACTTTAGACATTTCCAAATTAAAAGAACAAATTTTCGAAGCATCAAAAGCCCATTTAAATTTGGTGCCAGGAACTGAGGCAATTG
CAGGAGTTGCTGATGGCCTCGCAAATCTTAACCCTGTCACTTGGGTTAAGACCATTGGAAGTACTACGATTATAAATCTCATATTAATCCTTGTGTG
CCTGTTTTGTCTGTTGTTAGTCTGCAGGTGTACCCAACAGCTCCGAAGAGACAGCGACCATCGAGAACGGGCCATGATGACGATGGCGGTTTTGTCG
AAAAGAAAAGGGGGAAATGTGGGGAAAAGCAAGAGAGATCAGATTGTTACTGTGTCTGTGGCCTAA

SEQ ID 82

ATGAACCCCAGCGAGATGCAGCGCAAGGCCCCCCCCCGCCGCCGCCGCCACCGCAACCGCGCCCCCCTGACCCACAAGATGAACAAGATGGTGACCA
GCGAGGAGCAGATGAAGCTGCCCAGCACCAAGAAGGCCGAGCCCCCCACCTGGGCCCAGCTGAAGAAGCTGACCCAGCTGGCCACCAAGTACCTGGA
GAACACCAAGGTGACCCAGACCCCCGAGAGCATGCTGCTGGCCGCCCTGATGATCGTGAGCATGGTGGTGAGCCTGCCCATGCCCGCCGGCGCCGCC
GCCGCCAACTACACCTACTGGGCCTACGTGCCCTTCCCCCCCCTGATCCGCGCCGTGACCTGGATGGACAACCCCACCGAGGTGTACGTGAACGACA
GCGTGTGGGTGCCCGGCCCCATCGACGACCGCTGCCCCGCCAAGCCCGAGGAGGAGGGCATGATGATCAACATCAGCATCGGCTACCACTACCCCCC
CATCTGCCTGGGCCGCGCCCCCGGCTGCCTGATGCCCGCCGTGCAGAACTGGCTGGTGGAGGTGCCCACCGTGAGCCCCATCTGCCGCTTCACCTAC
CACATGGTGAGCGGCATGAGCCTGCGCCCCCGCGTGAACTACCTGCAGGACTTCAGCTACCAGCGCAGCCTGAAGTTCCGCCCCAAGGGCAAGCCCT
GCCCCAAGGAGATCCCCAAGGAGAGCAAGAACACCGAGGTGCTGGTGTGGGAGGAGTGCGTGGCCAACAGCGCCGTGATCCTGCAGAACAACGAGTT
CGGCACCATCATCGACTGGGCCCCCCGCGGCCAGTTCTACCACAACTGCAGCGGCCAGACCCAGAGCTGCCCCAGCGCCCAGGTGAGCCCCGCCGTG
GACAGCGACCTGACCGAGAGCCTGGACAAGCACAAGCACAAGAAGCTGCAGAGCTTCTACCCCTGGGAGTGGGGCGAGAAGGGCATCAGCACCCCCC
GCCCCAAGATCGTGAGCCCCGTGAGCGGCCCCGAGCACCCCGAGCTGTGGCGCCTGACCGTGGCCAGCCACCACATCCGCATCTGGAGCGGCAACCA
GACCCTGGAGACCCGCGACCGCAAGCCCTTCTACACCATCGACCTGAACAGCAGCCTGACCGTGCCCCTGCAGAGCTGCGTGAAGCCCCCCTACATG
CTGGTGGTGGGCAACATCGTGATCAAGCCCGACAGCCAGACCATCACCTGCGAGAACTGCCGCCTGCTGACCTGCATCGACAGCACCTTCAACTGGC
AGCACCGCATCCTGCTGGTGCGCGCCCGCGAGGGCGTGTGGATCCCCGTGAGCATGGACCGCCCCTGGGAGGCCAGCCCCAGCGTGCACATCCTGAC
CGAGGTGCTGAAGGGCGTGCTGAACCGCAGCAAGCGCTTCATCTTCACCCTGATCGCCGTGATCATGGGCCTGATCGCCGTGACCGCCACCGCCGCC
GTGGCCGGCGTGGCCCTGCACAGCAGCGTGCAGAGCGTGAACTTCGTGAACGACTGGCAGAAGAACAGCACCCGCCTGTGGAACAGCCAGAGCAGCA
TCGACCAGAAGCTGGCCAACCAGATCAACGACCTGCGCCAGACCGTGATCTGGATGGGCGACCGCCTGATGAGCCTGGAGCACCGCTTCCAGCTGCA
GTGCGACTGGAACACCAGCGACTTCTGCATCACCCCCCAGATCTACAACGAGAGCGAGCACCACTGGGACATGGTGCGCCGCCACCTGCAGGGCCGC
GAGGACAACCTGACCCTGGACATCAGCAAGCTGAAGGAGCAGATCTTCGAGGCCAGCAAGGCCCACCTGAACCTGGTGCCCGGCACCGAGGCCATCG
CCGGCGTGGCCGACGGCCTGGCCAACCTGAACCCCGTGACCTGGGTGAAGACCATCGGCAGCACCACCATCATCAACCTGATCCTGATCCTGGTGTG
CCTGTTCTGCCTGCTGCTGGTGTGCCGCTGCACCCAGCAGCTGCGCCGCGACAGCGACCACCGCGAGCGCGCCATGATGACCATGGCCGTGCTGAGC
AAGCGCAAGGGCGGCAACGTGGGCAAGAGCAAGCGCGACCAGATCGTGACCGTGAGCGTGGCCTAA

SEQ ID 83

MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVVSLPMPAGAA
AANYTYWAYVPFPPLIRAVTWMDNPTEVYVNDSVWVPGPIDDRCPAKPEEEGMMINISIGYHYPPICLGRAPGCLMPAVQNWLVEVPTVSPICRFTY
HMVSGMSLRPRVNYLQDFSYQRSLKFRPKGKPCPKEIPKESKNTEVLVWEECVANSAVILQNNEFGTIIDWAPRGQFYHNCSGQTQSCPSAQVSPAV
DSDLTESLDKHKHKKLQSFYPWEWGEKGISTPRPKIVSPVSGPEHPELWRLTVASHHIRIWSGNQTLETRDRKPFYTIDLNSSLTVPLQSCVKPPYM
LVVGNIVIKPDSQTITCENCRLLTCIDSTFNWQHRILLVRAREGVWIPVSMDRPWEASPSVHILTEVLKGVLNRSKRFIFTLIAVIMGLIAVTATAA
VAGVALHSSVQSVNFVNDWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRLMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGR
EDNLTLDISKLKEQIFEASKAHLNLVPGTEAIAGVADGLANLNPVTWVKTIGSTTIINLILILVCLFCLLLVCRCTQQLRRDSDHRERAMMTMAVLS
KRKGGNVGKSKRDQIVTVSVA